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247

Economic and Systematic Botany
Economic Collections
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Beldt's aquarium

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TROPICAL AQUARIUMS AND WATER GARDENS



What Our Customers Think About Our Aquariums and Aquarium Cement

Omaha, Nebr.
Nov. 16, 1932

Beldt's Aquarium:

Several days ago I received your No. 72 aquarium, and truly believe that it is the finest aquarium in the city of Omaha.

A. R. Benson

Martinsburg, W. Va.
Nov. 9, 1932

Beldt's Aquarium:

Enclosed find check for cement and gum oil. Doctor Wallace of our city recommends your cement as the only kind that is Leak-Proof.

Miss M. F. Gatrell

Fargo, N. D.
July 11, 1932

Beldt's Aquarium:

I am in receipt of the aquarium with which I was very much pleased.

Mrs. E. Thull

Clay Center, Kan.
Nov. 30, 1931

Beldt's Aquarium:

Please find enclosed check for your cement and special gum oil. Your cement is the best I have ever used.

W. H. Brill
Malden, Mass.
Feb. 6, 1932

Beldt's Aquarium:

Some time ago I bought some Aquarium cement from you and found it to be very good and durable and I am extremely surprised that it can be sold for such a low price.

Vincent Nyden

McAlester, Okla.
Dec. 28, 1931

Beldt's Aquarium:

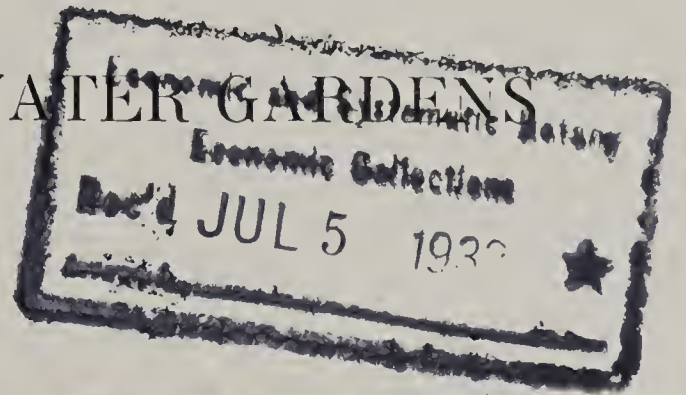
You may be interested to know that I have had great success with your cement. Repaired an aquarium one day and put the fish in the next morning without any apparent discomfort to them.

C. V. Stewart

TROPICAL AQUARIUMS AND WATER GARDENS

First Edition

Price 50c



PREFACE

Water Gardening has in the last number of years been taken up by almost everyone with a love for flowers. Tropical fishes have become so popular and well known that it is now possible to secure them in many varieties. We have published this book in order to supply much valuable information at a price everyone can afford. It is our pleasure to be able to contribute the knowledge we have gained through years of experience. It is obvious to mention that the purchase price does not nearly cover the cost of this book. It only helps us to be able to offer you the finest merchandise at such extremely low prices, because we do not have to add the cost of this booklet to the price of the things we sell and you will find that the purchase price can be saved many times on all of the various items you may need.

BELDT'S AQUARIUM

(A good place to trade)

St. Louis, Missouri.

GENERAL DIRECTIONS TO CUSTOMERS

Forwarding—All shipments of live stock are forwarded via express; also all glass articles. We guarantee glass articles only if forwarded via express and in case of damage in transit will replace all articles gratis only if a bad order is obtained from express company and mailed to us. We do not pay express charges on replacements or on original orders. We do not guarantee live stock sent through mail.

We do not pay postage or expressage on any shipments. All price quotations in this catalog are strictly net F. O. B. St. Louis except on items listed postpaid. Do not remit any money to cover express charges as these are collected when the express man delivers the goods. If you desire items sent parcel post, make your remittance large enough to cover postage. We can not guarantee parcel post shipments against damage or loss.

Correspondence—We can not give detailed information concerning breeding habits etc. of fish. In order to properly do so would require hours of writing concerning some of the varieties. Include with all inquiries a self addressed and stamped envelope.

Claims—We can not entertain claims unless they are made within 3 days upon receipt of shipment.

Cash with Orders—Please send sufficient money with order to cover the whole bill. We decline to ship "Collect on Delivery" unless 50% remittance be made to guarantee acceptance.

Shipping Cans—Orders for about two dozen fish or less are shipped in 35c cans which are not returnable. Except if you wish another shipment made you may return the old can prepaid. Goldfish are never shipped in thermos cans. Only tropical fish are shipped in thermos cans from Oct. 1 until warm weather. Also during summer Northern shipments to localities where nights are cold are benefited if shipped in thermos cans. A \$3.00 deposit is required on thermos cans which we refund upon receipt of empty can, which must be returned to us express prepaid. Empty cans can be returned from anywhere in the U. S. for only 20c prepaid.

We Guarantee the Live Arrival of Tropical Fish All Year Around. We will only cover losses in ship-

ments if Express Company bad order report is returned to us, and also any dead fish received, must be returned. (Sprinkle a little salt on the fish and wrap in wax paper) so we may identify them, and replace them. We refuse to make any replacements however, unless lost fish are returned to us the same day shipment arrives, and bad order report is mailed to us, not later than three days after receipt of shipment. Our responsibility ceases when fish are delivered alive, and we do not guarantee results after arrival. We do not guarantee live delivery of tropical fish beyond the sixth zone, or more than 1500 miles from St. Louis. Any order received for fish farther than 1500 miles from St. Louis carries the agreement that they travel entirely at purchaser's risk.

Shipping Season—We ship everything listed in this catalogue all year around. During cold weather tropical fish are shipped in thermos cans. Goldfish shipments cannot be made during extremely hot weather, and we cannot guarantee the live delivery of goldfish from May 10 to October 1; however, we ship them all summer, when weather conditions permit. We reserve the right to delay orders, should weather conditions arise that may call for delays on shipments, and such delay, in no way, should be a cause for cancellation of orders.

Canadian Shipments—Obtain a permit to import plants from the Department of Agriculture, Ottawa, Ontario. Send us permit number. You keep original.

Non-Warranty—Various conditions, such as unfavorable weather, improper planting, etc., may cause poor results. We send out only first quality stock, but we give no warranty as to productiveness or description.

Selecting Tropical Fish—Not all varieties listed can be shipped in one can. Customers desiring only such varieties that can be kept together in one aquarium should order those marked * which are known as "Happy Family Fish."

Pairs—Quite often a fancier wishes to match odd fish in order to pair them. You can purchase either sex at one half the catalog price as quoted for pairs.

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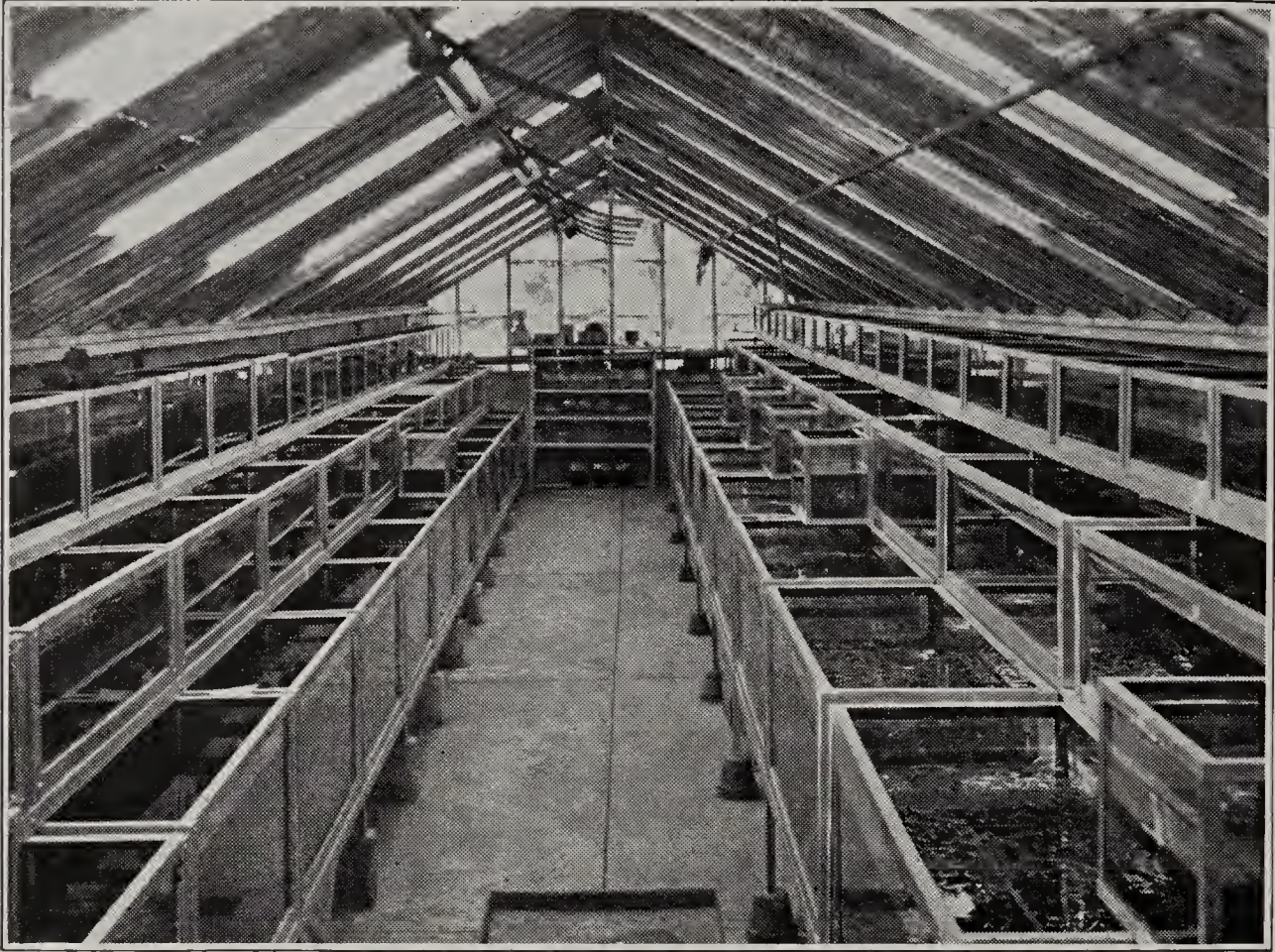


Center Aisle in Our Exhibition House

Our Retail Store is open daily from 8 to 5 p. m. Sundays until noon. Closed on holidays.

VISITORS WELCOME

Our location is 6200 West and 2100 North. Drive to 6200 Easton Ave., and go North on Kienlen to Bailey Place, one block West on Bailey Place. Via street car: take Hodiamont Car to end of line and walk three blocks West. Phone EVergreen 7265.



View of one of our many breeding houses at our hatchery located 12 miles west of St. Louis. You are cordially invited to visit our hatchery which is located on a forty acre tract of land one mile north and about one mile west of the St. Louis Airport.

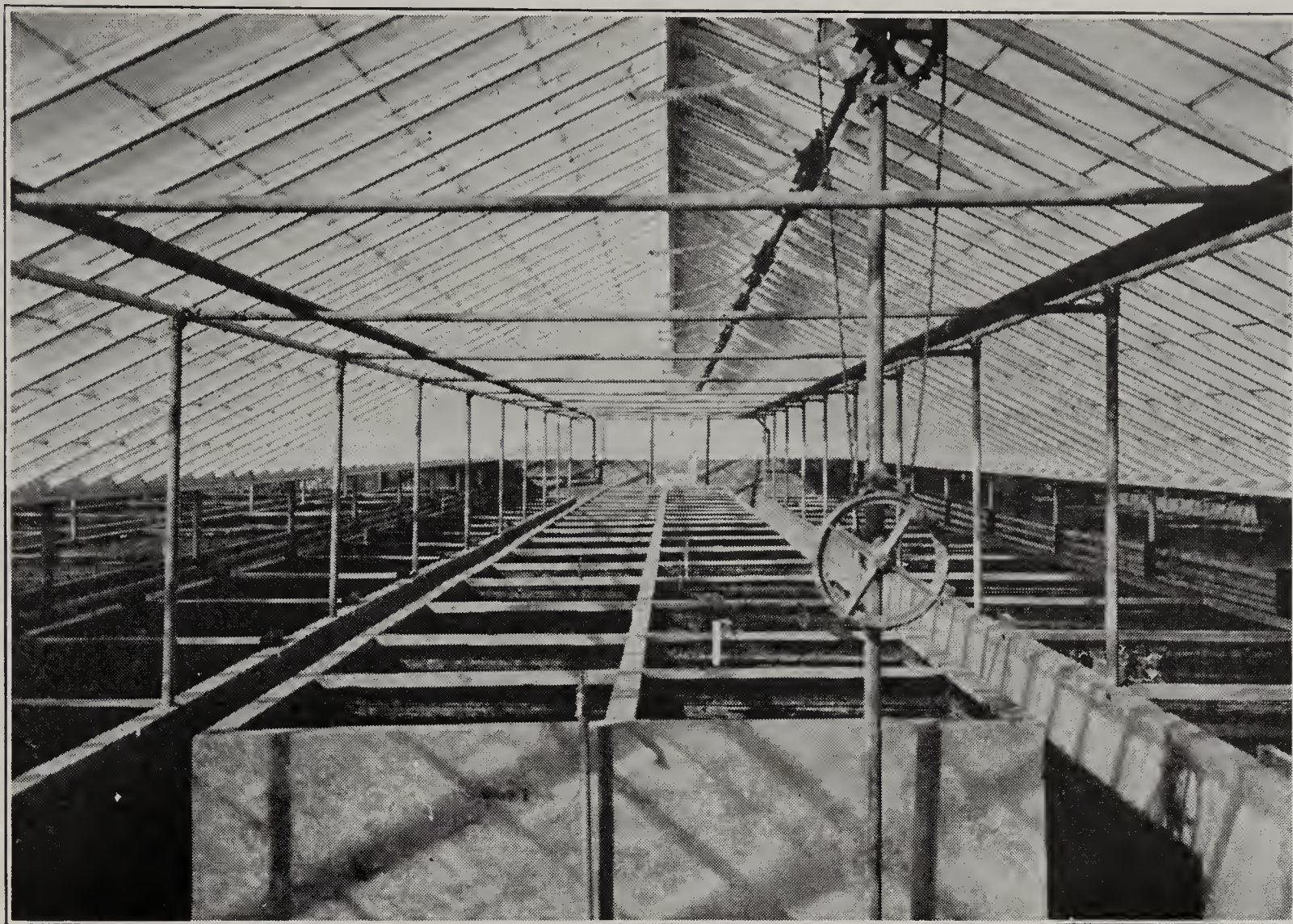
Over 80 ponds outside present a mass of blossoms of various colors of water lilies during the summer months. Our hatchery is closed Sundays and Holidays.



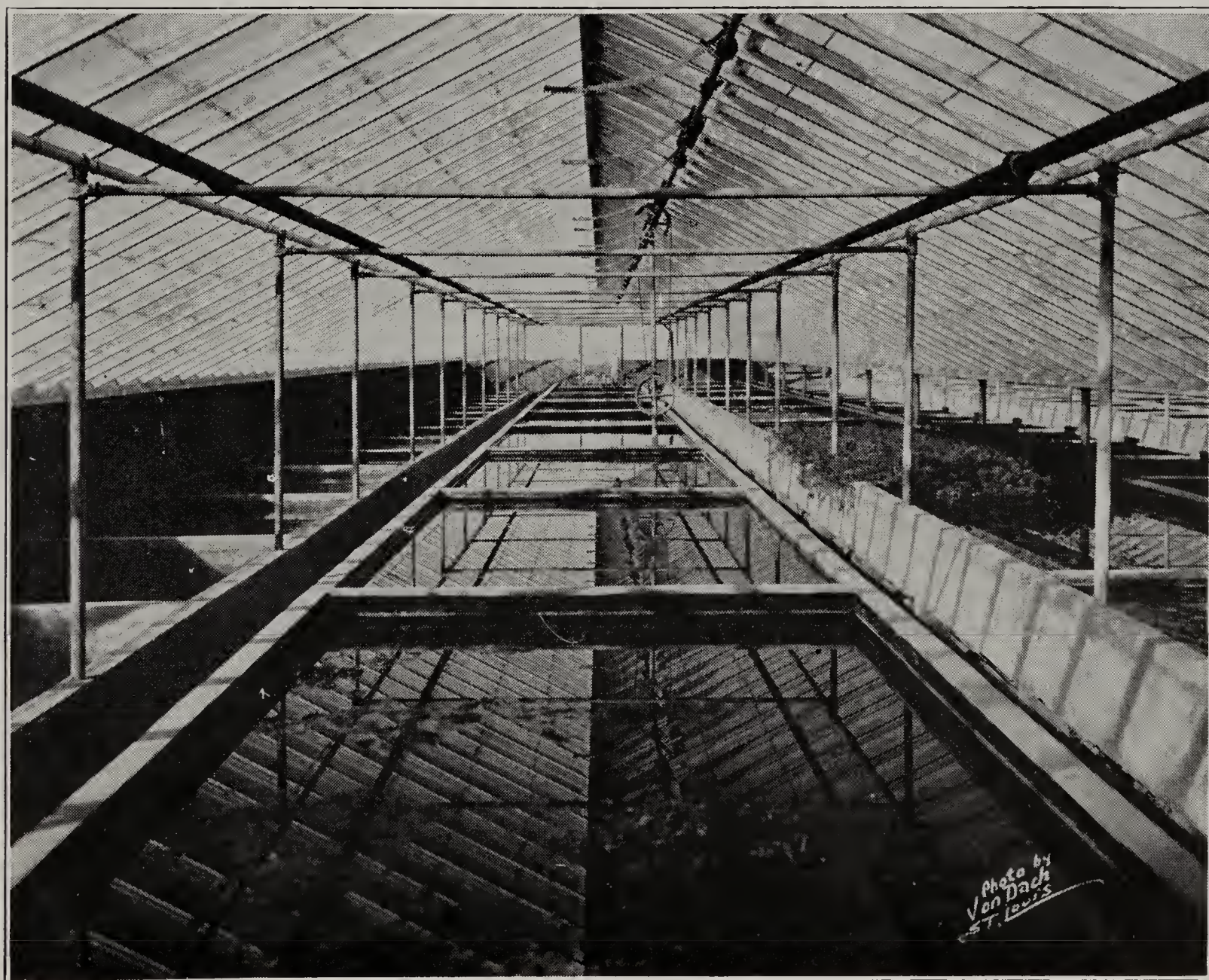
Birds Eye View of Our Hatchery

The 6 greenhouses seen in this picture are one hundred feet long and cover a floor surface exceeding 15,000 square feet. It has been proclaimed by many visitors who come from all parts of the country as the finest establishment of its kind.

Our retail department and exhibition building including our main office are located in Wellston, in North West St. Louis 6200 West and 2100 North. This department is open every week day from 8 a. m. to 5 p. m. and Sunday mornings.



Partial view of our hatcheries, located in Florissant, Mo. From here thousands of rare ornamental fish and water lilies are shipped to every state.



OUR HOBBY

You are missing something tremendously interesting and educational if you do not know the pleasure and pastime afforded in water gardening, whether it may be an out-door lily pool surrounded by a rock garden, or an aquarium in a sun room containing the many interesting and beautiful toy tropicals and beautiful foliage of aquatic plants. Modern science and knowledge have greatly contributed ways and means that enable you to enjoy water gardening with ease and a minimum of labor and expenditures.

No other hobby offers so much healthful recreation, genuine satisfaction, and so many educational features for the entire family as an aquarium. The aquarium is the only possibility through which you can convert as little as two square feet of space into a perfectly balanced bit of nature that has not the ap-

pearance of being artificially restricted and limited. A balanced aquarium is a little world in which you can see the inhabitants as contented and playful as in their native habitat. The unlimited variety of plant and fish life obtainable makes aquarium keeping an ever fascinating hobby.

If you own an aquarium or a lily pool, you are enjoying something tremendously worth while. If you have never owned one, you have missed the most pleasing experiences of your life. Many fanciers have discovered that the keeping of an aquarium or lily pool is extremely simple once you have secured the proper material and the proper information we offer you in this catalogue. A complete variety of all necessities which are required for aquarium success is listed in this booklet.



An average order for tropical or goldfish weighs from 10 to 20 lbs. In order that you may determine express or parcel post rates from St. Louis we are listing below 5 lb. parcel post rates and 20 lb. express rates.

Approximate Parcel Post Rates on 5-lb. Packages

First Zone	Second Zone	Third Zone	Fourth Zone	Fifth Zone	Sixth Zone	Seventh Zone	Eighth Zone
50 miles	50 to 150 miles	150 to 300 miles	300 to 600 miles	600 to 1000 miles	1000 to 1400 miles	1400 to 1800 miles	over 1800 miles
13c	13c	17c	24c	33c	40c	50c	59c

Approximate Express Rates on 20-lb. Cans Live Fish

Second Zone	Third Zone	Fourth Zone	Fifth Zone	Sixth Zone	Seventh Zone
20 lb.—38c	20 lb.—69c	20 lb.—84c	20 lb.—\$1.23	20 lb.—\$1.82	20 lb.—\$2.26

THE PEP COLLECTION

In assorting this collection, we had in mind a lot of speed. All of these varieties are extremely lively and they swim rapidly and are constantly moving. They combine beautiful colors with peaceful habits and extreme hardiness being not affected by temperature changes like other varieties. The common disease "ich" which is a small microbe and attaches itself to fish, seems to be unable to molest them even if other fish in the same tank seem to be affected, due to their rapid movements. We offer this collection especially to beginners as they require very little care. The illustrations are slightly larger than shipping size and have been made from well developed and older fish. M signifies male and F female.

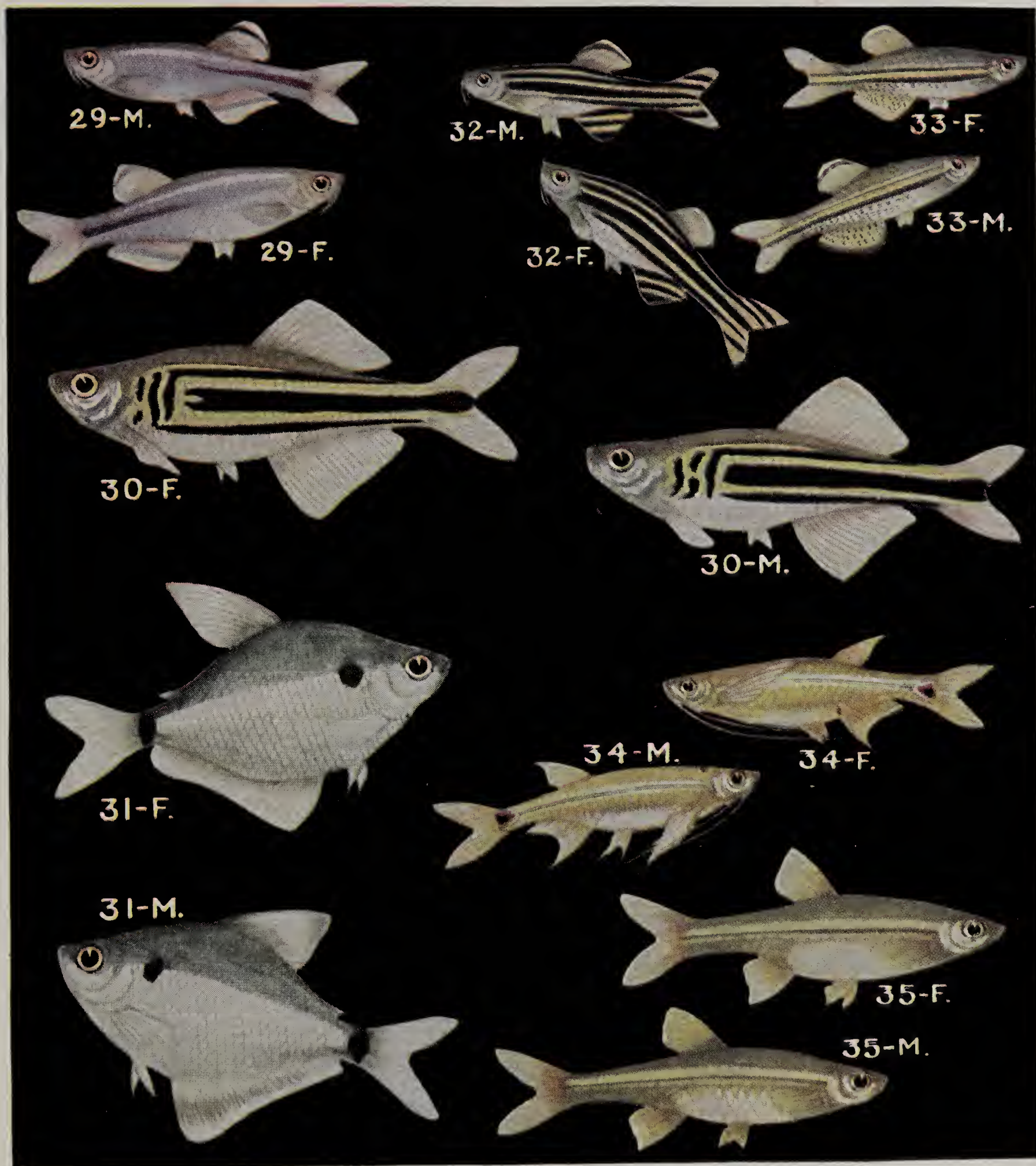


Plate No. 6 (Collection No. 6)

Collection No. 6

14 fish—7 pairs

Catalog Price \$7.30

Special Collection Price \$6.50

		Pair			Pair
No. 29	Brachydanio albolineatus (Mother of pearl fish)-----	\$0.60	No. 32	Brachydanio rerio (Zebra fish)-----	\$0.60
No. 30	Brachydanio malabaricus (giant danio)-----	1.50	No. 33	Brachydanio analipunctatus (spotted danio)-----	1.00
No. 31	Tcenobrecon splurius (silver barb)----	0.80	No. 34	Esomus Malaynesis (Flying barb)-----	1.00
			No. 35	Rasbora meinkeni (golden banded barb)	0.80



Collection No. 9

(Photographed in Natural Colors)

Collection No. 9 All breeders in full color like illustration, 6 pairs.....	\$18.00		
Collection No. 9-a Half grown about one half size of picture, 12 fish.....	9.00		
No. 41 Black helleri, pair.....	2.50		
No. 42 Rainbow helleri (rubra hybr.) pair....	2.00		
No. 43 Platy poecilius varieatus, (Full color)			pair
Smaller size, sex guaranteed		2.00	
No. 44 Black Sailfins (Mollenesia Sphenops)		5.00	
No. 46 Scalare.....		4.00	
Small size.....		1.50	
No. 45 Hy. Auratus (gold Tetra).....		3.50	

NEW VARIETIES OF FANCY FISH FOR OUTDOOR POOLS

European Golden Trout, peaceful, can be kept with goldfish. Per pair \$2.00. Get two feet long. Can not be shipped in hot weather.

Special Collection: One pair each: Golden trout, Red carp, Calico carp. All three pairs only \$4.00

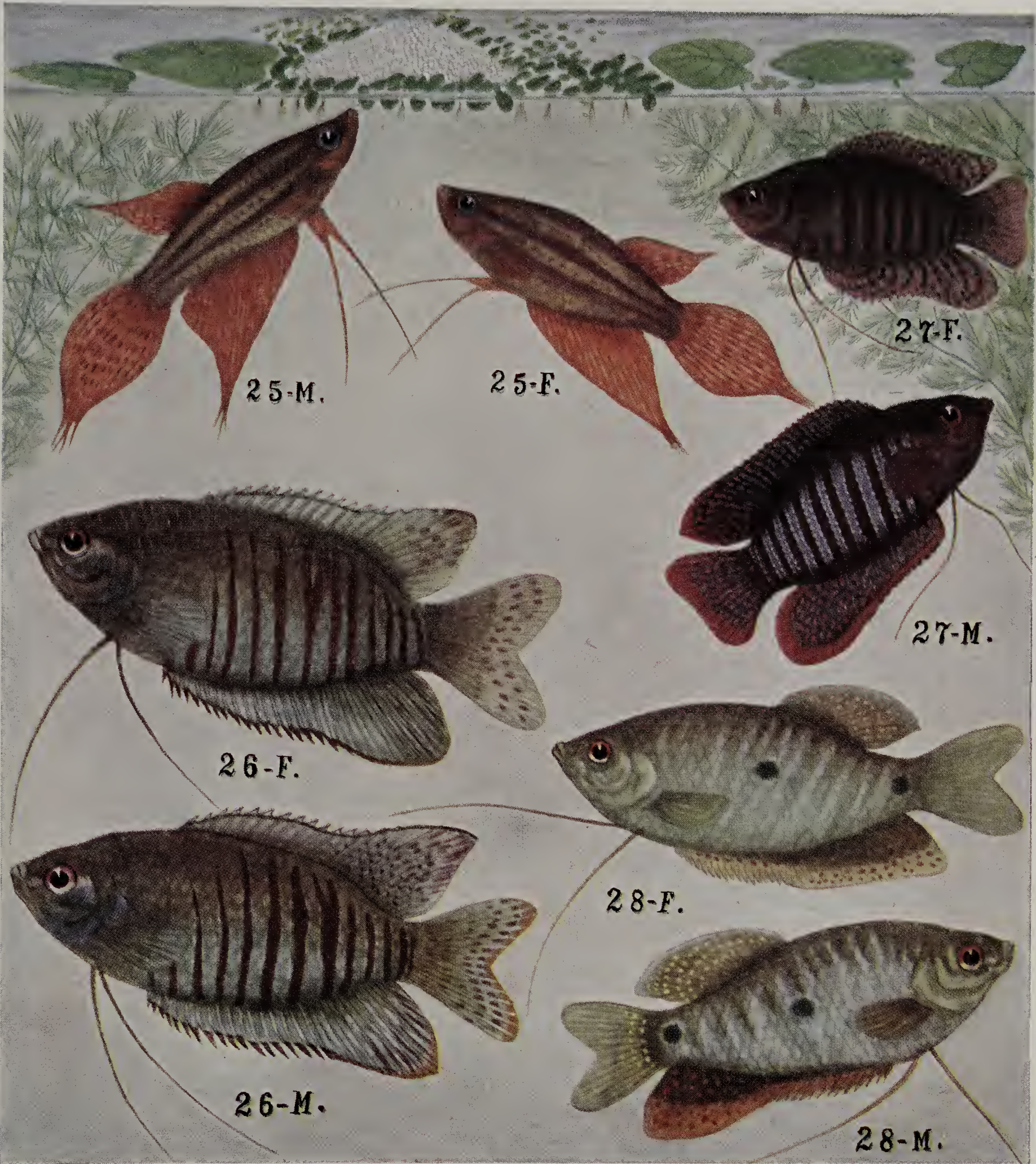
Chinese Red Carp get one foot long. We ship about 3-4" stock. Pair \$1.00.

Chinese Three Colored Carps. These fish also are peaceful and hardy. Four inch size, pair \$1.50.

Goldfish Collection No. 50..... 20 Fancy Goldfish for \$4.00

These 20 fancy goldfish will be sufficient to stock a four by eight foot pool. Here is what you get: 2 fancy calico telescopes, 2 Chinese moors, 4 red

fringetails, 4 shubunkins or calico fish, 4 comets and 4 goldfish. Shipping can 35c extra.



(Illustrations life size)

No. 8 Collection

Owing to the great interest shown in Labyrinth fish (Bubble nest builder) we are featuring this collection at a greatly reduced price. See page six for breeding habits and care. Our reasons for combining these above varieties in this collection are because "They are easy to keep and also thrive on our Silver Brand prepared fish food and do not require live food."

SPECIAL COLLECTION PRICE
Four Pairs \$8.25

No. 25	Tcenops vittatus (croaking gourami)	Pair	No. 27	Colisa Lalia (dwarf gourami)	Pair
No. 26	Trichogaster fasceata (striped gourami)	\$2.00	No. 28	Osphromenus trichopterus (two spotted gourami)	\$2.00
		2.50			2.00

See complete price list of tropical fish on pages 11 and 12.



Plate No. 5

Collection No. 5

The new Gold Helleri in shape is like the Mexican Swordtail, but in color resembles the Gold Platy, with deep red dots and stripe through center. Betta Cambodia, the Veiltail of Tropicals. The New Blood Moon male is clear and red, the female is orange red. Danio Albolineatus, the Mother of Pearl Fish. All four varieties live peacefully in one aquarium. Illustrated in natural size.

1. Gold Helleri
2. Betta Cambodia
3. Blood Red Moon
5. Danio Albolineatus

Catalog Price \$7.30 for
these four pair.

Our
Collection
Price **\$6.50**

4. Illustration of Betta Cambodia which shows the variation in colors from red to blue as compared with No. 2.

LIVE BEARER (VIVIPAROUS KILLIFISHES)

	Per Pair		Per Pair
Gambusia rigani	\$1.50	*Platy poecilius varieatus large in full color	4.00
*Platy poecilius xiphidium	1.50	*Platy p. varieatus, medium breeding size	2.00
*X. montezumae (pure bred from imported stock)	4.00	*Platy Poecillia pulchra	1.00
*Xiphophorus helleri (new stock with brown stripe, male has two stripes, can stand 50° F.	3.00	*Crescent Gold moon	1.00
*Limia arnoldi	0.80	*Xiphophorus montezumae, Hybrid, medium size	2.00
*New Blood Red Platy (Moon). Both males and females are clear blood red without spots	1.50	*Guppyi (Peacock Fish)	0.20
*Platy poecilla maculata (Blue Moon), turquoise blue side, red dorsal	0.80	*Heterandria fomosa (smallest) live bearer	0.30
*Platy poecilla rubra (Red Moon)	0.80	*Hybrids of Platy rubra and Swordtails, medium	1.00
*Limia versicolor	0.50	*Hybrids, large (males with Swordtails)	2.00
*Girardinus reticulatus	1.50	*Girardinus caudomaculatus	0.50
*Platy poecilla nigra (Black Moon)	0.80	*Mollenesia fomosa	1.50
*Gold platy (Gold Moon)	0.80	*Golden Hybrids	1.00
*Xiphophorus Helleri (Swordtail)	1.00	*Mollenesia sphenops (Bl. Var) \$2.00, \$3.00 & \$5.00	
*Red Helleri (medium) sex not guaranteed	1.50	*Mollenesia latapinna (Sailfish)	0.80
*Red Helleri, large breeder, sex guaranteed	4.00	*Orange tail Helleri	1.50
*Black Helleri (medium) sex not guaranteed	1.50	*Orange sided Helleri	1.50
*Black Helleri, large breeder	2.50	Gambusia Holbrookii	0.80
*Golden Helleri (new) same shape as Mexican Swordtail, color similar to Gold Platy	2.50	Gambusia affinis	0.50
*Black spotted Red Helleri	2.00	*Guppyi (Chainback variety)	0.50
*Priopella bonita	1.50	*Poecilla vivipara	0.80
		*Poecilla sphenops	0.80
		*Poecillia (Var. Moll.) Sphenops, speckled variety	2.00

PANCHAX VARIETIES

Panchax lineatus	2.00	Fundulus chrysotus	1.00
*Panchax chaperi	1.50	Fundulus gularis	4.00
*Panchax playfairy	1.00	Fundulus notti	1.00
*Panchax panchax	1.25	*Fundulus goodei	1.00
*Oryzias latipes	0.50	*Fundulus macdonaldi	0.80
*Leptolucanna ommata	1.00	*Fundulus hetroclitus	1.00
*Aphyosemion australe (Ribbon tail panchax)	3.00	*Chriopeops goodei	1.00

CICHLIDS

Cichlasoma facêtum chanchito	2.00	*Pterophyllum Scalare, 1-year-old	7.50
Hemichromis bimaculata (Jewel Fish)	2.00	*Pterophyllum Scalare, young	1.50
*Etroplus maculatus	3.50	*Pterophyllum altum breeders	5.00
*Acara thayeri	2.50	Cichlasoma severum	3.00
Cichlasoma nigrofasceatum	2.00	*Mesonauta festivum	6.00

NEST BUILDERS

Paradise Fish	0.80	*Ctenops vittatus	2.00
*Dwarf Guorami	2.00	*Emerald green betta	2.50
*Osphrominus trichopterus	2.00	*Betta rubra (red)	5.00
*Trichogaster fasceata	2.50	*Betta cambodia (veiltail), medium	2.00
*Betta splenden	2.00	large breeders	2.50
*Polycanthus cupanus	.80	*New blue betta (cornflower blue)	\$2.00 & \$4.00
Macropodus chinensis	.80	*New Lilac blue betta	3.00

SEMI-TROPICALS

A special list of fishes which can stand a temperature of 45° F. without injury. They can easily be shipped throughout the coldest winter months in

thermos cans and are especially desirable for those unable to maintain high temperatures in their aquariums.

*Sailfins	\$0.80	Rainbow darters	0.75
*Black mollenesia	\$2.00 to 5.00	*Cardinal fish	0.75
Gambusia hoolbrookii	0.80	*Notropis deliciosus	0.75
*Oryzias latipes	0.50	*Notropis whipplii	1.00
Fundulus chrysotus	1.00	Paradise fish	0.80
Fundulus macdonaldi	0.80	*Elassoma evergladei	1.00
Fundulus notti	1.00	*Jordinella floridae	1.00
Fundulus pallidis	1.00	Fundulus hetroclitus	1.00
Red notropis	1.00	*Cheatodons (Black Banded Sunfish)	1.00

*All Fish marked * are Happy Family Fish and can e kept together.

CHARACINS AND OTHER EGG LAYERS

	Per Pair		Per Pair
*Barbus stolizcanus.....	0.80	Mouthbreeder.....	1.00
*Barbus conchonius.....	0.80	*Badis badis.....	2.00
*Barbus semifasciolatus.....	1.00	Polycentrus schomburgki.....	2.50
*Barbus phutunio.....	0.80	Channa fasciata.....	3.00
*Barbus oligolepis.....	2.50	Channa fasciata, young.....	2.00
*Barbus lateristriga.....	3.00	*Jordinella floridae.....	0.60
*Barbus ticto.....	0.80	*Cyrodoras microps.....	2.00
*Barbus vittatus.....	1.00	*Melanotaenia Nigrans (Australian Rainbow Fish).....	1.50
*Tcenobrecon splurius.....	0.80	*Tetra oceliffer (Head and Tail Lights)	2.00
*Hyphrescobrecon flameus (rios).....	1.00	*Danio analipunctatus.....	1.00
*Tetragenopterus rubropictus.....	2.00	Rainbow darters.....	0.75
*Pristella riddlei.....	2.00	*Cardinal fish (chrosomus eyrthrogaster).....	0.75
*Ambasis ranga.....	4.00	*Notropis deliciosus.....	0.75
*Glandulocauda inequalis.....	3.50	*Notropis whippilii.....	1.00
*Hemmigramus caudovittatus.....	1.00	*Copeina guttata.....	2.00
*Danio rerio.....	0.60	*Elassoma evergladei.....	1.00
*Danio albolineatus.....	0.60	*Esomus malaynesis.....	1.00
*Danio malabaricus	1.50	*Rasbora meinkeni.....	0.80
*Hyphrescobrecon bifasceatus.....	1.00	Talapia Macrocephala New Mouthbreeder.....	1.50
*Blue tetra.....	3.50	*Hy. Auratus (Gold Tetra).....	3.50
*Rasbora heteromorpha.....	6.00		

** All Fish marked * are Happy Family Fish and can be kept together.*

New Varieties

A number of new live bearers are listed in this catalog. All of these varieties were received from the Expedition of Dr. Myron Gordon of Cornell University, Ithaca, N. Y. All of these new fish come from Mexico. The most outstanding of them all is the new live bearer *Platy poecillius varieatus*. They are slightly smaller than swordtails, more beautiful than any other live bearer with blue sides, fire red tails, orange colored dorsals. Price full color pair \$4.00, medium size breeders \$2.00. The original never before offered *X. montezumae* also came in

shipments from this expedition, price per pair \$4.00. A new Mexican swordtail also arrived can stand temperature of 50° F., has brown stripe instead of red, males have two stripes. Price per pair \$3.00. Also following new varieties *Gambusia rigani*, pair \$1.50. *Platy poecillius xiphidium*, pair \$1.50. *Priopella bonita*, pair \$1.50. All of these new fish are life bearing which makes them so much more interesting to the majority of fanciers. *Platy poecillius varieatus* also can stand a temperature of 45° F. But for best results keep these fish above 65° F.

Special Collection of Baby Live Bearer

Through popular request we offer here collections of small live bearers. Many fanciers prefer to buy these fish at reduced prices and raise them them-

selves. While we can not guarantee a certain size we will ship if available fish one-half inch long in these collections.

Send 35c Extra for Shipping Can.

Collection No. B-1	
12 assorted moons.....	\$2.00
Collection No. B-2	
2 sailfins, 2 black mollensia, 2 peecillia sphenops	
4 swordtail, 4 guppyi, all one inch long.	
Price.....	\$2.50
Collection No. B-3	
12 platy poecillius varieatus, one half inch long	\$3.00

Collection No. B-4	
4 black helleri, 4 rubra and swordtail hybrids,	
4 orange tail helleri.....	\$3.00
Collection No. B-5	
10 mosquito fish, 10 guppyi.....	\$1.50
Collection No. B-6	
6 assorted moons, 6 assorted hybrids.....	\$2.75

**All tropical fish listed having * in front of their names can be mixed.*



Plate No. 2 (Illustrations about two-thirds of life size)

Special
Collection No. 2

Includes 13 pairs or
total of 26 fish.

Special
Price \$14.75

No. 6, No. 8, and No. 9 are not included, as they can not be mixed with the other others. For breeding habits, etc., turn to pages 25 and 26.

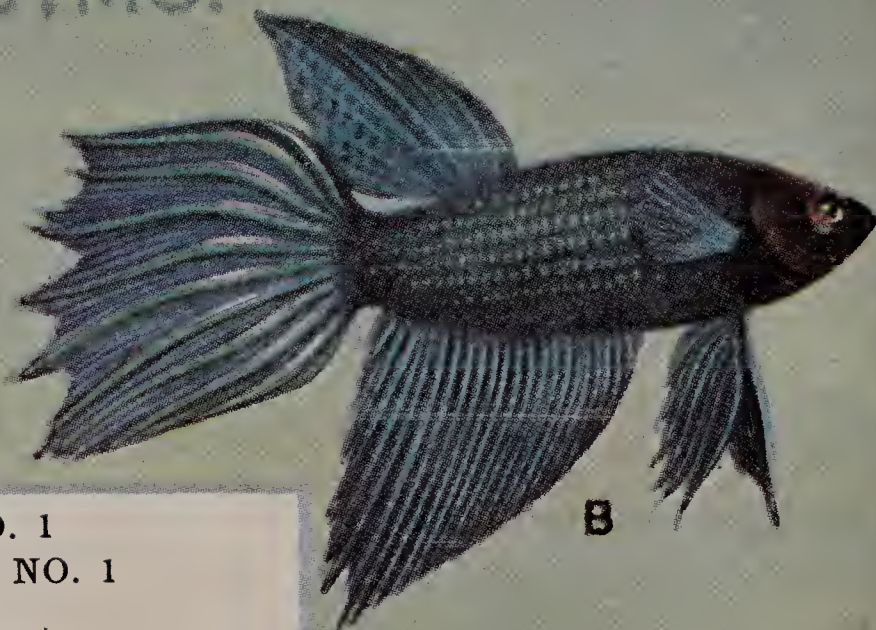
		Per Pair			Per Pair
No. 1	Black moon	\$0.80	No. 9	Hemichromis bimaculatus (Jewel Fish)	\$2.00
No. 2	Blue moon	0.80	No. 10	Hemmigramus caudovittatus	1.00
No. 3	Gold moon	0.80	No. 11	Poecillia vivipara	0.80
No. 4	Tetra rubropictus	2.00	No. 12	Poecillia sphenops	0.80
No. 5	Guppyi (Peacock Fish)	0.20	No. 13	Hyphrescobrecon flameus	1.00
No. 6	Macropodus chinensis	1.00	No. 14	Limia arnoldi	0.80
No. 7	Betta splenden	2.00	No. 15	Barbus oligolepis	2.50
No. 8	Ciclasoma nigrafasceatum	2.00	No. 16	Polycantus dayi	0.80

BELDT'S AQUARIUM

2141 CRESCENT AVE.
ST. LOUIS, MO.



A



B

PLATE NO. 1

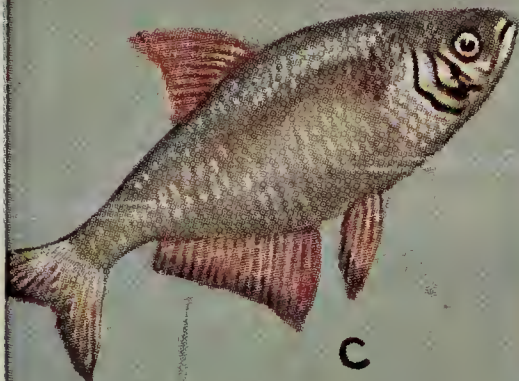
COLLECTION NO. 1

- A Dwarf Gourami
 - B Blue Betta (Cornflower)
 - C Hy. Bifasceatus
 - D Panchax Panchax
 - E Melanotaenia Nigrans
 - F Panchax Playfairi
 - G Black Spotted Red Helleri
 - H Orange Sided Helleri
- One Pair of Each of These Eight Fish,
as Illustrated, Total Sixteen Fish

-----\$12.50

SPECIAL COLLECTION NO. 1-A

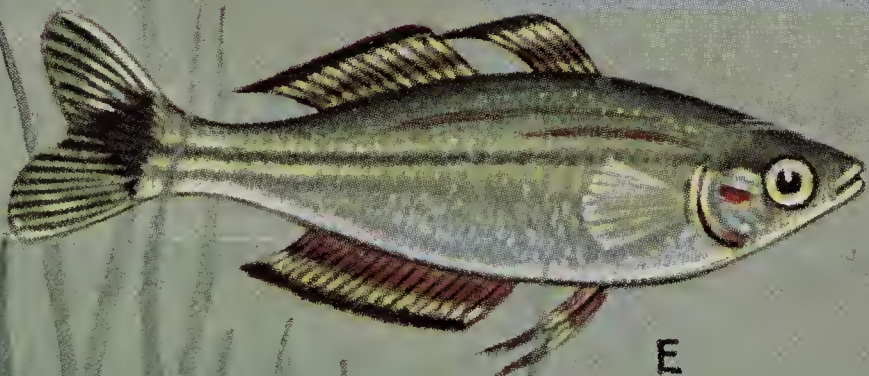
Same as No. 1, Except We Will Ship 1
Pair Medium Red Helleri Instead of
the Black Spotted Variety as Pictured
on This Page for Only -----\$11.50



C



D



E



F



G



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MAGNIFICENT COLLECTION OF BEAUTIFUL SEMI-TROPICAL COLORED FISH

Here is a beautiful collection of semi-tropicals and these fish will stand a low temperature of 45° F. You can keep these fish with goldfish in the living room aquarium and you can also keep them in a pool with goldfish which makes this collection a feature for Lily pool owners. Most of them will reproduce in the pool and multiply without attention the same as common goldfish.



Plate No. 4
(Illustrations life size)

No. 4 Collection		Eight Pairs	Catalog Price \$5.70	Special Collection Price	\$5.30
This is a collection of semi-tropical fish; all of these fish will stand a temperature of 45° F., and they can be shipped all year round. During extreme cold weather they are shipped in thermos cans.					
		Pair		Pair	
No. 17	Jordinella florida	\$0.60	No. 18	Paradise fish	\$0.80
No. 19	Fundulus chrysotus	1.00	No. 20	Rainbow darter	0.75
No. 21	Notropis deliciosus	0.75	No. 22	Fundulus macdonaldi	0.80
No. 23	Fundulus hetroclitus	1.00	No. 24	Notropis whiplii	1.00
All of these fish can be kept together.			Aquarium capacity required: 8 gallons.		
Shipping can, 35			cents extra.		

SPECIAL HOPLOCHILUS COLLECTION

(Egg Laying Killifish)

Here is a collection of extreme interest for the advanced aquarist as well as the novice. Killifish are quiet and will some times for several minutes stand in the same position without showing a sign of life. When food is thrown into the aquarium they dart quickly and snap the food. They can jump after the food high out of the water. The aquarium should be covered with glass.



Plate No. 7

SPECIAL COLLECTION NO. 7

Catalog Price \$7.75

Collection Price—5 pairs \$7.25

No. 36 Panchax Panchax, pair.....\$1.25

No. 37 Panchax chaperi, pair.....\$1.50

No. 38 Panchax Playfairi, pair.....\$1.00

No. 39 Chriopeops goodei, pair.....\$1.00

No. 40 A. australe (Ribbon tail panchax) pair....\$3.00

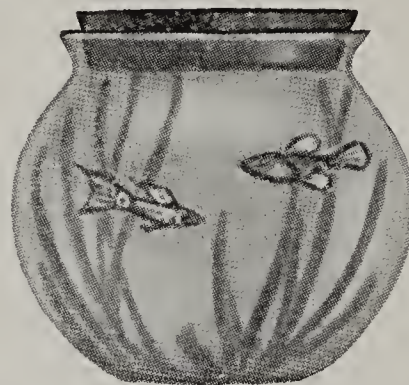


Mollenesia Sphenops (Jet Black)

Well-colored fish are solid black. Black-spotted when not fully developed.

Medium sized pairs, breeding size...\$3.00 and \$4.00

Extra large, 2 years old, like illustration, per pair.....\$5.00



Guppy Bowl Special

1 pair of guppyi, one oxygen plant, 1 snail, 1 guppyi bowl 3¾ inch diameter, 3¾ inch high, 1 package silver sand, 1 can fishfood. This guppyi bowl collection sent postpaid anywhere in U. S. for only \$1.00. During cold weather one pair medaka will be shipped instead of guppyi.

COLLECTION NO. 3
Illustration life size



Plate No. 3

No. 1, Cardinal Fish (*Chrosomus Erythrogaster*), upper male.

No. 2, Sailfins (*Mollienisia Latipinna*), lower male.

Special Price for these Two Pairs, \$1.50

Shipping can, 35 cents extra.

Cardinal Fish, per pair.....\$0.75 Sailfins, per pair.....\$0.80

These fish can stand a temperature of 45° F. without injury. They can be kept with gold or tropical fish. We ship them all year round, but in extreme hot weather may postpone shipments. During very cold weather thermos shipping cans should be used. A \$3.00 deposit is required on these thermos cans, which we refund. Sailfins are born alive. Cardinal fish lay eggs.

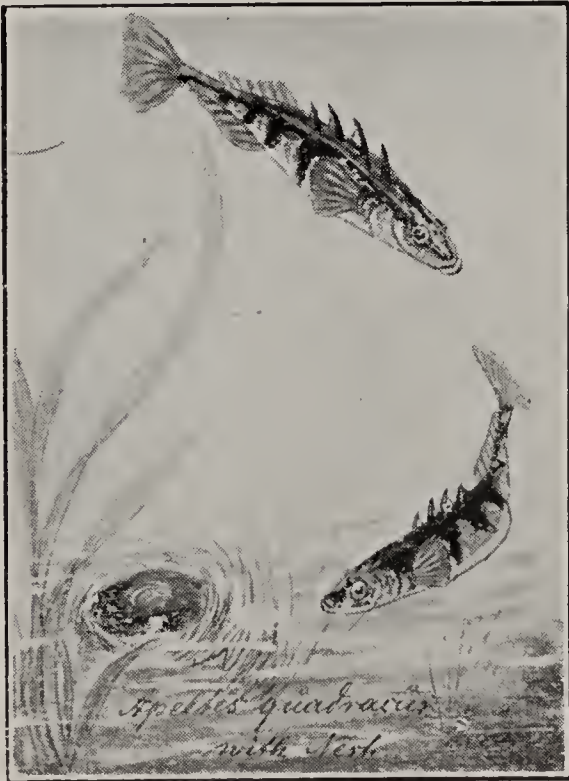
Nest Building Sticklebacks



Mesogonistius Cheatodons
(*Black banded sunfish*)

A very graceful and popular cold water fish also known as (Poor Man's Angle fish). They are peaceful and can be kept with many different medium size Tropicals. Shipped only from Oct. 15 until June 1.

Price, per pair.....\$1.00; Per doz..... 5.00



This is a cold water fish we ship them only from Oct. 15 to June 1. They build a nest out of tiny roots and leaves; the male guards the eggs and young. They are scrapers and should not be mixed.

Per pair ..\$0.75

Per doz. ... 3.00

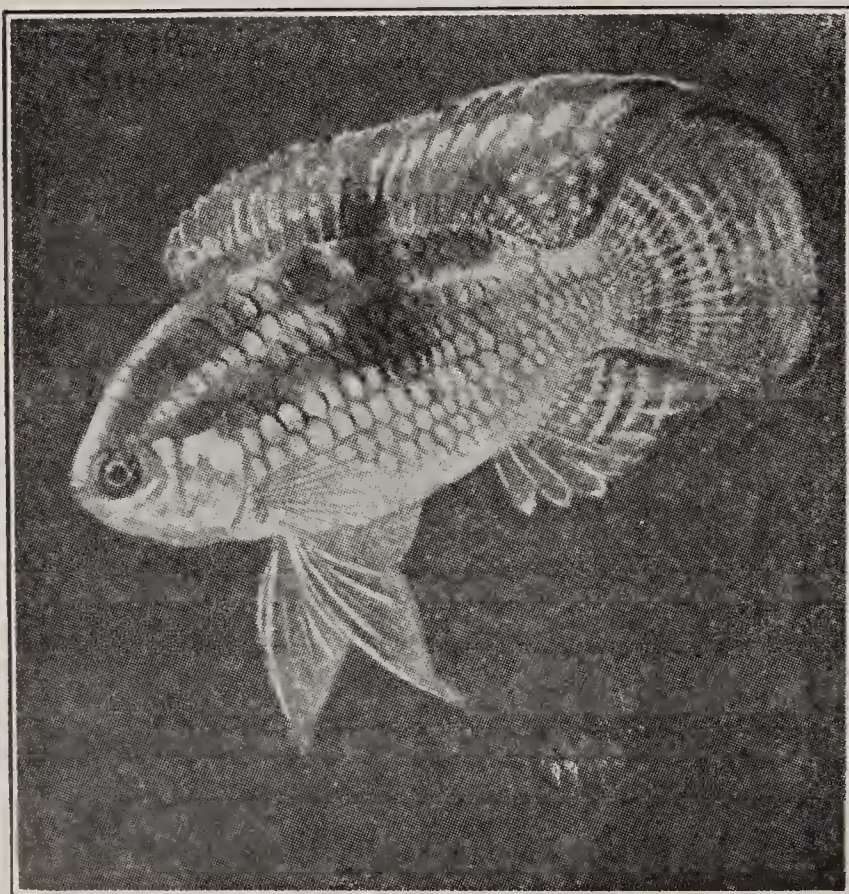


No. 1, *Barbus Lateristriga*; No. 2, *Barbus Vittatus*; No. 3, *Barbus Ticto*;
No. 4, *Barbus Semifasciolatus*; No. 5, *Barbus Conchoniatus*;
No. 6, *Barbus Phutunio*.

BARBUS COLLECTION

Barbus varieties are very popular and hardy. They are very lively fish and brilliantly colored and are well suited for the Happy Family tank.

Special Barbus Collection. One pair of each variety, 6 pairs in all. Price.....\$7.00
Add 35 cents for shipping can.



Acara curviceps (Thayeri)

Egglayer (Amazon River)

Picture shows fully developed male. Will breed when much smaller. Beautiful shades of green, yellow and blue. Can be mixed with Scalare Barbs, etc.

Per pair.....\$2.50

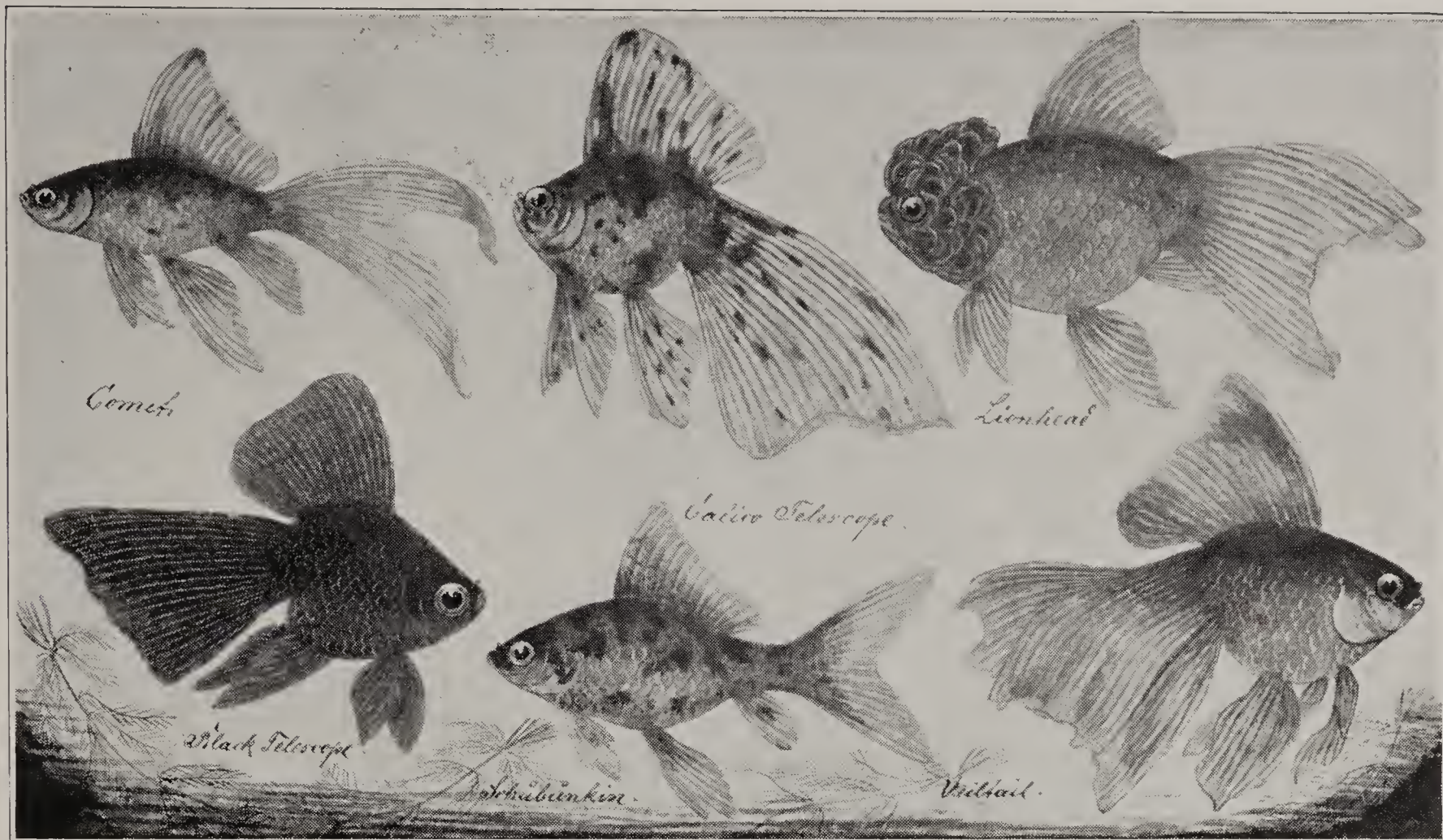


Cichlasoma Facetum
(Chanchito)

They show beautiful colors of light yellow and warm brown at breeding time. Eyes red. Amazon River.

Per pair.....\$2.00

A collection of cichlidae in a large aquarium are quite attractive.



GOLDFISH PRICE LIST

The Tails Are Included in the Measurements

Common Goldfish

	Pair	Dozen	100
Med. Large, 2 to 3 in.....	\$.15	\$1.00	\$3.50
Extra Large, 3-4 in.....	.30	1.50	5.00
No. 1 Fountain, 4 to 6 in.....	.50	2.50	12.00
No. 2 Fountain, 6 to 7 in.....	1.00	5.00	35.00
Whales, about 1 ft. long.....	2.50		

Comets and Silver Fish

	Pair	Dozen	100
Medium, 2 to 3 in.....	\$.25	\$1.50	\$8.00
Large, 3 to 4 in.....	.40	2.00	12.00
Extra Large, 4 to 6 in.....	.75	3.50	20.00
Very Large, 8 to 12 in.....	3.00		

Japanese (Korean) Fringetails

	Pair	Dozen	100
Small, 2 in.....	\$.25	\$1.25	\$8.00
Medium, 2 to 3 in.....	.50	2.50	15.00
Large, 3 to 4 in.....	1.00	5.00	32.50
Extra Large, 6 to 8 in.....	5.00		

Shubunkins or "Calico Fish"

	Pair	Dozen	100
Medium, 2 to 2½ in.....	\$.25	\$1.25	\$8.00
Large, 2½ to 3½ in.....	.50	2.50	15.00
Extra Large, 3½ to 5 in.....	1.25	6.00	
Extra fancy selected fish, according to quality			
-----	\$2.00 to \$3.00	pr.	

Lionheads and Orandas

Our illustration shows a six year old Oranda, with perfect head development. This hood does not take good form until the third year on fish about 3½ inches long and is absent on all younger fish.

	Pair
Small, 1 to 2 in.....	\$1.50
Medium, 2½ to 3 in.....	3.00
Large, 3 to 4 in.....	5.00

Telescopes

Red, Black, or Calico

	Pair	Dozen	100
Small, 2 to 2½ in.....	\$.50	\$2.50	\$15.00
Med. 2½ to 3½ in.....	1.00	5.00	35.00
Special Select 4 in. Stock.....	2.00		

Selected Veiltails

Calico Veiltails can be had with or without telescope eyes; however, Black Veiltails can only be supplied with telescopic eyes.

	Pair	Dozen
Medium Large, 2 to 3 in.....	\$2.00	\$10.00
Large, 3 to 4 in.....	3.00	15.00
Extra Fancy, large developed Veiltails, 4 to 5 in.....	5.00	

All these various goldfish are hardy and can be mixed. Shipping cans for 25 small fish 35c each. For larger orders, send 60c additional for can. These cans are not returnable.



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FANCY GOLDFISH COLLECTION

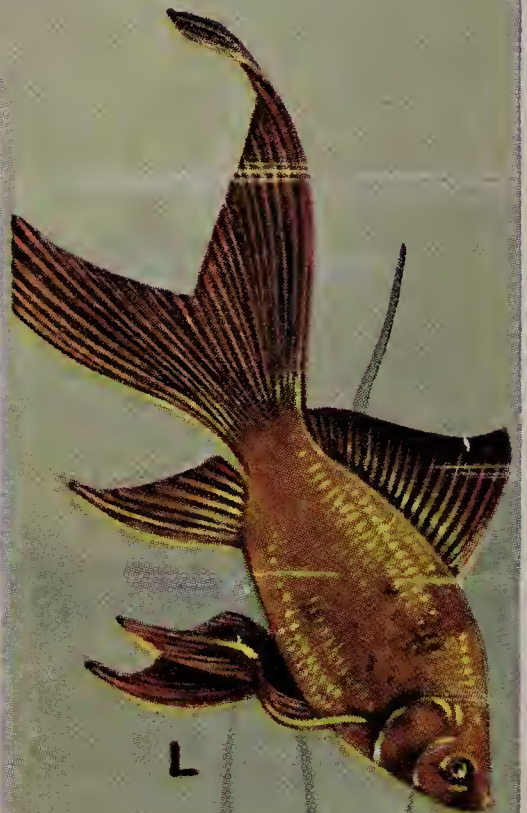
I Calico Telescope	2½ Inch
J Veiltailmoor	2½ Inch
K Red Fringetail	2½ Inch
L Red Comet	4 Inch
M Veiltail Calico	2½ Inch
N Lionhead	3 Inch

One of Each of These Six Beautiful
Goldfish, as Illustrated and Size Listed.
Total \$6.00

1 Pair of Each Total 12 Fish Special
Price \$11.50



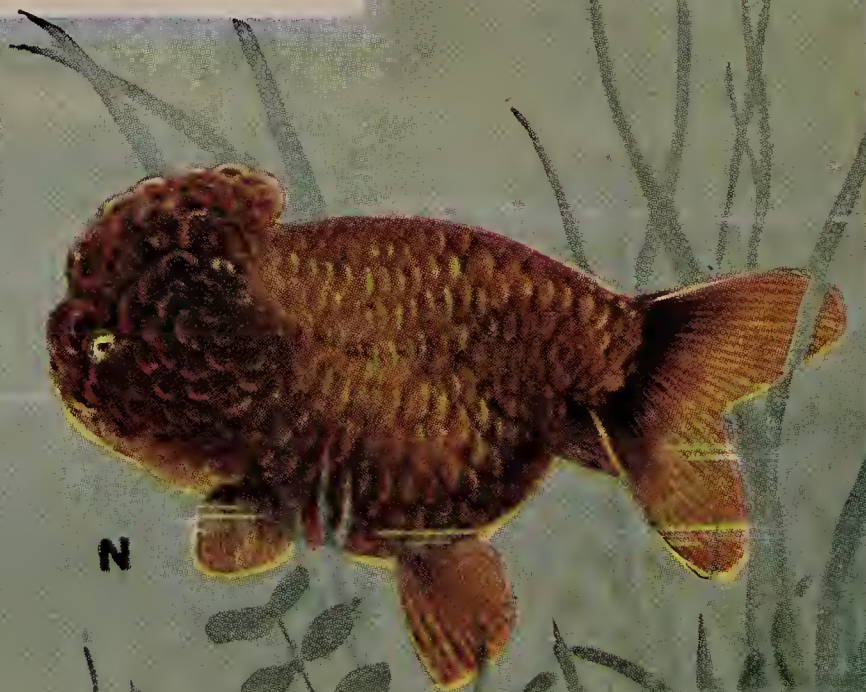
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BELDT'S AQUARIUM

2141 CRESCENT AVE.
ST. LOUIS, MO.

Shubunkins
(Calico Fish)

Shubunkins are hardy and can be left outdoors in the pool over the winter the same as plain goldfish



Shubunkins

The Shubunkin is a very beautiful colored goldfish. No two fish are alike in color, in fact the two sides of the same fish may be entirely different colors, patches of red, black, yellow, green or blue are distinguished by a pearl background.

	Per pair	Per dozen	Per 100
Medium, 2 to 2½ inches-----	\$0.25	\$1.25	\$8.00
Large, 2½ to 3½ inches-----	0.50	2.50	15.00
Extra large, 3½ to 5 inches-----	1.25	6.00	42.50
Extra large fancy selected fish, per pair-----			\$2.00-\$3.00

Shipping cans 35 cents extra.



Scavengers

No. 1 Red Ramshorn snail, each 20c, 6 for \$1.00, Doz. \$1.75.

No. 1 Black Ramshorn snail, each 10c, 6 for 30c, Doz. 50c.

No. 2 Red Australian snail, each 20c, 6 for \$1.00, Doz. \$1.75.

No. 3 Trumpet or Niagara snail, each 15c, 6 for 75c, Doz. \$1.25.

No. 4 African ear horn snail, each 15c, 6 for 75c, Doz. \$1.25.

No. 5 Japanese snails, (live bearing) each 20c, 6 for \$1.00, Doz. \$1.50.

No. 6 Fresh Water clam, each 25c, 6 for \$1.25, Doz. \$2.00.

No. 7 Tadpole, each 10c, 6 for 50c, Doz. 90c

No. 8 Japanese weatherfish, each 50c, 6 for \$2.50, Doz. \$4.75.

No. 9 Japanese red bellied newt, each 25c, 6 for \$1.25, Doz. \$2.00.

No. 10 American newt, each 15c, 6 for 75c, Doz. \$1.25.

No. 11 Fire Salamander, each \$1.50.

Geographic turtles, size of silver dollar, each 25c.

When snails, clams and newts are ordered, they can be packed in damp moss in a box and sent through the mail. Weatherfish and tadpoles can only be shipped in water. Add 35c extra for can when ordering these. Also be advised that they are only shipped via express. Snail orders amounting to less than \$2.50 must be accompanied by 25c extra for parcel post and packing charges.

For care of Scavengers, see next page. See Special Scavenger Collection on page 23.

Special Scavenger Collection

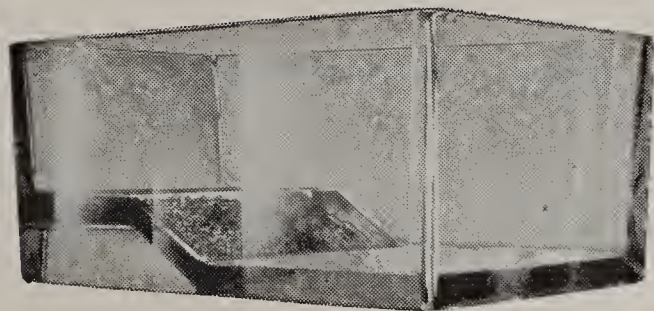
One of each No. 1 to 10 including one each black and red ranshorn snail. All eleven scavengers including shipping can. Catalog value, \$2.90. Special collection price only \$2.40 including shipping can.

Care of Scavengers

Snails feed on alga and all kinds of refuse such as decaying vegetation and food matters if too much food is fed to the fish. (Weatherfish and tadpoles answer the same purpose). All of these will eat fish food also. If kept as scavengers in an aquarium however they should not receive any special food. They should form a part of every aquarium as they keep the aquarium in sanitary condition and clear and free from odor. Snails also relish fresh lettuce leaves on which they should be fed occasionally if kept separate for breeding. Snails lay

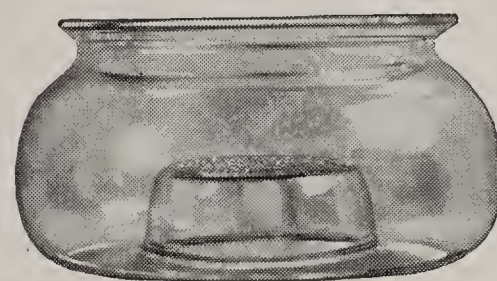
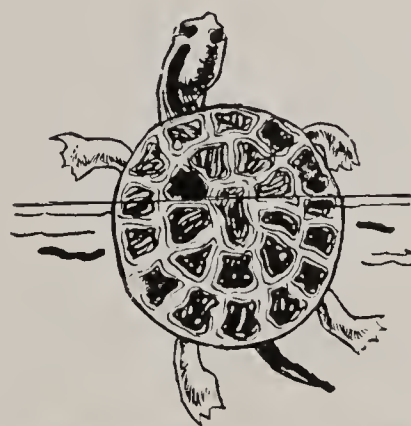
(*Ampularia gigas*) four horned snails similar to Japanese snails. Cannot be kept in aquariums as they eat plants. Only for outdoor pools. They are used greatly to produce infusoria. For which purpose keep them in separate tank and feed lettuce. Per pair 75c.

(**Marble snail.**). A new round snail. Each 20c, 6 for \$1.00, Doz. \$1.50.



No. 6203 Turtle Tank

Length	Width	Depth	Price Each
6¼	4¼	4¾	\$1.25



No. 858 Turtle Tank

No.	Diam.	Depth	Opening	Price Each
858	6	3	4¾	75c

Interesting Books for the Fish Fancier

"Goldfish and Their Care" A 24 page booklet for beginners. Also describes tropical fish. Postpaid 15c.

"Goldfish Varieties and Tropical Aquarium Fishes" by Wm. T. Innes. 306 pages, 284 illustrations. Sent postpaid in United States \$4.00.

"Fishes in the Home", by Ida M. Mellen. New Edition. 177 pages, \$2.00, postpaid.

"The Modern Aquarium", by W. T. Innes. 30 illustrations, 64 pages. \$1.00 postpaid.

"Guide to the Study of Fresh Water Biology", by James G. and Paul R. Needham. 88 pages. Price \$1.35 postpaid.

eggs in a jelly like form on the sides of glass and plants. There are usually about 25 little dots in each mass of jelly which hatch out to be snails about 4 weeks after eggs are laid, all depending on sunshine and heat. Clams are especially good to clear up green water and if an aquarium turns green the addition of a clam or two will usually clear the water. Clams are invaluable as pool scavengers.

Water newts have some scavenger value, however the main feature about them is that they are very interesting and harmless pets. In very small aquariums they should not be used. They relish dried shrimp and raw scraped beef and earth worms. Fire salamanders and turtles are not strictly aquatic and must be provided with a place to rest above water. Feeding care the same as newts, shrimp, scraped beef and earthworms. Frogs should not be kept in pools except very small ones as large frogs are very destructive and eat many fish.

The Balanced Aquarium

The proper location and exposure means about half of the success you will have with your tropical or goldfish aquarium. Under no consideration should the tropical aquarium be kept in either a northern or western window. Always use a southern or eastern window where the aquarium will receive at least two hours of direct sunlight each day. If it is not possible to use a southern or eastern exposure, a western exposure will be found better than a northern exposure. However, very few plants should be planted in the aquarium, as the aquarium plants do not function properly unless they get enough sunlight. It may be well to mention here that an electric light will create quite a plant growth if it is right close to the aquarium, however, this does not mean that the plants are functioning properly and are producing oxygen. Under these conditions, these plants, if planted too thickly, are more detrimental than beneficial. Water absorbs oxygen from the air, and after the fish deplete this oxygen, the water has a continuous tendency to reoxygenate itself just by being in contact with oxygen or air. Therefore, an aquarium which is not in a southern or eastern exposure should not be well planted. You cannot keep nearly as many fish in an aquarium in which the plants do not seem to function properly.

Aquarium Sand

Next to the location of the aquarium, the aquarium sand, which you place in the bottom, is of very great importance. It should not be a fine, white, lake sand as this sand packs too tight and the roots of the plants do not grow properly, which results in a poor plant life in the aquarium. Use a coarse sand, but not too coarse to allow uneaten fish foods to fall in between the sand, if the sand is too gravelly the fish and snails will have no access to the food or decaying vegetation which will decompose and foul the water, creating an acid condition. All dirt accumulating in a tropical aquarium should be removed about once each week through the use of a dip tube which you will find listed in this catalogue. They are also known as Syphons. Another great aid in keeping the aquarium clean is the glass feeding ring which we list in this catalogue. It keeps the food from spreading all over the surface of the aquarium.

Feeding Tropical Fish

Most all tropical fish will feed on good prepared fish foods such as we have listed in this catalogue. Never feed small fish a very coarse fish food. For all tropical fish or goldfish up to 1½ inches long, our Silver Brand fine food should be used, and for those fish over 1½ inches long always use Silver Brand medium fish food. We have also a tonic fish food containing cod liver oil and various other minerals, being beneficial to fish, especially fish in a run-down condition. We also prepare a laxative fish food which should be fed to fish about once a week to eliminate such conditions as dropsy and locked bowels. Never attempt to feed tropical fish the common wafer food which is mostly used for goldfish. Fish food for tropical fish never should contain meal or flour of any kind as this has a tendency to create constipation. Beldt's Silver Brand Fish Food for tropical fish is guaranteed not to contain any meal or flour in any form. There are many kinds of live foods which can be fed to tropical fish, the most

common of these being Daphnia and Cyclops. It is hard to collect one without the other, as in most ponds, where there is Daphnia, Cyclops will also be found. While some fanciers consider Cyclops injurious to fish, they are not injurious if fed to fishes that are at least one week old. These Cyclops and Daphnia can be collected by seining through the water with nets constructed from fine cheese cloth or other fine-woven material. There is no other food that will put a faster growth on small fry than live daphnia.

White Worms

White worms are about the best live winter food that can be fed tropical fish. We can supply a setting of white worms for breeding or feeding purposes for \$1.00 post-paid. These white worms are propagated in a cool cellar. It is best to start a small box when just beginning to propagate them and later on use a larger box for they propagate much better when they are crowded. To propagate white worms you should have a box about 12 inches square and 8 inches deep and the soil to be used for breeding white worms should be very good black garden soil. It is best to use, also, old rotted leaf mould about 2 or 3 years old, or if you cannot obtain this, you will find that in old hollow trees in the woods there is an accumulation of leaf mould or decayed wood. This is also good to start a white worm box with. Also cow manure about 2 years old can be used with great success. White worms will not propagate if the temperature is above 75° F. They will breed rapidly at a temperature of between 40 and 60° F. Always keep the dirt moist. It is best to cover the box with a piece of glass or slate to keep the dirt from drying out. The best kind of food to use is boiled rice, mashed potatoes, boiled oats, or bread. All of these before mentioned foods should be thinned out with fresh or canned cream. We prefer canned cream as it does not have a tendency to sour as quickly. This food should be placed in ridges in the dirt and covered with at least 2 inches of the dirt. If you place this food too near the surface, it will become mouldy.

Fresh Water

Never place tropical fish or any other fish in fresh water. Great care should be used in starting an aquarium with tropical fish. Fill the aquarium with water and let stand for at least one week before introducing the fish. Fresh water usually contains too many injurious chemicals, also, too much oxygen which is injurious to tropical fish in creating various diseases such as Fungus, or Itchthyophthirius, or gill congestion. These diseases are very contagious. We have complete directions on Fungus and its cure in this catalogue under the heading of Beldt's Fungus Remedy.

Temperature

The best temperature of the tropical fish aquarium is between 70 and 80° F. Many varieties will stand lower temperatures and most all of them will stand higher temperatures. The most important thing is to avoid sudden temperature changes. Never place fish from warm water into cold water, or from cold water into warm water. Both changes may prove fatal, and cause the fish to develop ich or Fungus. In order to maintain an even temperature, it is best to use a glass cover on the smaller aquariums. This also is effective in keeping the fish from jumping out as many tropical fish will jump out of the aquarium unless it is covered. We also list in this

catalogue various electric heaters, some of them automatic with which an even temperature may be maintained at all times.

Cleaning the Aquarium

When cleaning the aquarium it is best to save all the old water. Syphon about $\frac{3}{4}$ of the old water into a bucket and set this on the side. Do this before you start pulling out the plants or catching the fish so this water is clean. Then pull out the plants and remove the fish. Be sure you put the fish in the same water syphoned out of the aquarium and cover them up, because they will jump if placed in solid quarters. You can then wash the old sand and use it over again or use new sand if the old sand has become too black to use. The sand should be washed thoroughly, then take all the old water which you first syphoned out and put it back into the aquarium. Place a piece of glass or a saucer on the sand on which you pour this water so that it will not stir the sand too much as that will cause the water to become cloudy. When you have the aquarium about half full of water, then plant the aquarium with the aquatic plants. When filling the balance of the aquarium with water it will be well to mention that if you place a piece of wax paper on the surface of the water it helps from stirring up the water and loosening up the plants. If the old water in the aquarium has turned green and entirely new water has to be used, leave the aquarium stand at least one week before putting in the fish.

Breeding Tropical Fish (Live Bearers)

The amateur tropical fish fancier usually starts with the live bearing varieties. As all the fish are born alive, they are easier to propagate than egg layers. However, you will find that with a little experience many of these egg layers are just as easy to breed. Smaller varieties of live bearing fish such as Guppyi, Moons, mature when they are about 4 months old. Larger fish such as Swordtails, Mollinesia, Helleri usually are old enough to breed when about 9 months old. All varieties of live bearing fish will have about 6 litters of young per year. The size of the litter depends on the size of the mother, also, the size of the aquarium and the healthy conditions of the fish. You may have only one dozen young in a litter and we have seen as high as 260 young swordtails produced in one litter. The best temperature for live bearing fish is between 74 and 80° F. If the aquarium is large enough and well planted no provisions should hardly be needed for the young fish as the young fish hide among the bushy plants and the parents do not seem to eat them. However, if the aquarium is crowded and not large enough, it would be best to place these fertile females in breeding cages such as we list in this catalogue, or small aquariums which are well planted in which the young can hide. Our drum shaped bowls which hold about 1 gallon of water are very practical for this purpose. It is always safe to put these young fish back in the large aquarium with the older fish when they are about 5 weeks old. You will also notice that on various occasions many of these young are born dead which is more or less a normal condition which can hardly be remedied. Occasionally, all of the young may be born dead which may be a case of premature birth and there seems to be nothing that can be done about this. Sometimes these fish are born with a yolk sack, that is the center of the body where the stomach should be still looks like an egg.

These fish are unable to stay near the surface of the water. Whenever live bearing fish are born in such a weak condition, it is advisable to place them in shallow water about $\frac{1}{2}$ or 1 inch deep. Quite a number of fish are saved by doing so. Some fanciers have claimed that fish, so born, drown, which in one sense of the word is correct. They are killed more, however, through water pressure than for lack of oxygen. Because these fish are born premature, their air bladder seems to be undeveloped; they seem to be unable to balance themselves properly. Young live bearing fish should be fed on a finely prepared food. You can also feed them infusoria for about one week. After one week's time, infusoria seems to have little food value for them. You will find infusoria described in detail under the propagation of egg laying fishes for which infusoria is a necessity.

Panchax Varieties and Other Egg Laying Killifishes

This family comprises quite a number of species of tropical fish found in Asia, Africa, South America and southern U. S. To this family belong all Fundulus and Panchax varieties. In most cases the eggs hatch in from 10 to 16 days. In some cases, as for instance Fundulus Gularis eggs take 6 weeks to hatch. The best method of propagating these fish is to separate them for about 2 weeks and feed them well on live foods. Then when placing these fish together, put a lot of bushy plants such as Fontinalis, water hyacinths, or myriophyllum into the aquarium. These plants should be near the surface as most of these killifishes prefer to spawn near the surface, except all of the African Killifishes which mostly spawn on the bottom of the aquarium. Those from Asia mostly all spawn near the surface. These killifishes lay their eggs singly among these bushy plants. After they have spawned for about 10 days in the aquarium they should be separated again and the bushy plants with the eggs should be placed in a separate container for hatching. These fish are quite large when they hatch and can be fed on live Daphnia. These young egg laying killifishes cannot be fed on dry foods.

Infusoria

All egg laying tropical fish, when they are about to swim, must be fed on infusoria. Infusoria can be produced with decaying vegetation. A strong infusion can be produced with the aid of dried vallisneria which we list in the catalogue. This dried vallisneria is placed in hot water and when this cools off you can pour about a pint of vallisneria in about 20 gallons of water. This makes a very strong infusion and will last about a week or two. It is well to take some water out of an old aquarium and put it in an infusoria tank when starting same as there is apt to be more infusoria life in an old aquarium with large fish than in fresh drinking water. Keep infusoria in a shady place. It is best produced at a temperature between 70 and 90° F. and should be kept out of direct sunlight. You can test this infusoria culture easily by putting a drop on a piece of glass and holding a flash light underneath. Also, the use of a magnifier will aid greatly in locating these microbes. About 50 to 100 microbes can be seen in a drop of water when the culture is good. Pour about a pint of this water in the aquarium in which you have these young egg laying fish. They should be fed on this infusoria about a month and as soon as they are able to eat daphnia, they should be fed daphnia. Quite a number of egg laying fishes can be raised by feeding a finely powdered fish food.

Cichlids

Most all cichlids are savage fishes and cannot be kept with other varieties. They may even kill their own mates in the breeding tank. There is a belief among some fanciers that these fish can be mated for life which is not true. You may spawn a pair of *Hemichromis* one time and the next time the male may kill the female. Therefore, it is well to state that most tropical fish, (there may be some species which the writer has not noticed) only mate for one spawning, and the next time they are ready to breed, they are mated with a different female. At times these fish are hard to get to mate and it is best to use a glass partition and keep each fish separate where they can see each other, and feed them on earth worms and small insects. When the female is ready to spawn, the egg tube can be noticed on all of these various Cichlids. On the *Scalare*, if you see the egg tube protruding from the female, it is a sure sign of immediate spawning. Once you have fed Cichlids on live foods for a while and you have created the right conditions for breeding, you will have very little trouble in getting these fish to mate. You may then remove this partition. If the fish fight, replace this partition and then remove it entirely if the fish get along peacefully. Cichlids prefer to lay their eggs on flat rocks or insides of flower pots. They fan their eggs for about 4 days and then the eggs start to roll as the small tail which has broken through the egg produces a continuous movement. The Cichlids make small holes in the sand in the aquarium and keep these young fish in these depressions. In about two days time they will start to swim and the old fish will take care of them for about 10 days. It is well to mention that the parents should be fed on small worms at this time as they may turn cannibalistic and eat their own off-spring. We have received many inquiries in regards to propagating *Scalare*. We have propagated *Scalare* for quite a number of years. The breeding habits are not nearly as secret as some fanciers believe them to be. While it is difficult to tell the sex on *Scalare*, if they are fed properly on white worms and live daphnia, it will not take very long that the fish are in a condition that the sex is easy to tell. The *Scalare* is one fish that will have to be fed on live food if you expect to propagate them. If they are in good condition they are no trouble to breed, but it takes nothing but live food to create these good spawning conditions. White worms, small water boatman, large daphnia, and young tropical fish such as *Guppyi* should be fed them, and feed them all they can eat. They prefer to spawn on *Sagittaria Sinensis* the broad leaved variety. They will also spawn on *Cryptocoryne* plants, in fact we have spawned them more on *Cryptocoryne* plants than any other plant. On one occasion a pair of *Scalare* which had just spawned, and which had been placed in a separate aquarium not prepared for spawning, laid their eggs on the side of the glass of the aquarium as there were no plants of any kind in the aquarium for them to spawn on. The great secret to propagate tropical fish is to get the fish in proper condition to breed. If you feed them properly and give them the right conditions the female will become ripe with eggs and the males will be ripe with sperm. Fish so conditioned cannot be kept from breeding, in fact a female will spawn when separated from the male. A ripe apple will not stay very long on a tree, therefore it is well to emphasize conditions which lead up to the spawning of tropical

fish and these conditions such as proper feeding and proper temperature should always be kept in mind, as these are the fundamental principals in the care and propagation of all tropical fish.

Labyrinth Fishes

(Bubble Nest Builders)

There are quite a number of nest building tropical fish such as *Paradise fish*, *Osphromenus*, *Polycanthus*, *Gourami*, all various new varieties of *Bettas* such as *Betta Splenden*, and *Betta Cambodia*. All of these fish are known as Labyrinth fishes because they have a chamber above their gills in which they store oxygen for breathing. All of these fish will come to the surface of the water every few minutes. All these fish build nests constructed from mucus in the form of floating bubbles. They prefer to build these floating nests under the surface of water lily pads, water ferns and other floating plants. It is best to provide some kind of floating plants for them to build these nests under as any air circulation in the room in which you intend to breed these fish may be liable to destroy this nest. The eggs are deposited below the nest and the male takes these eggs in his mouth and blows them into the bubbles. The male is continuously kept busy in keeping these eggs in the nest as occasionally they fall to the bottom. The female should be removed after the spawning as quite a number of them eat the eggs. Most all Labyrinth fishes eggs hatch in from 36 to 48 hours. The male should not be removed until the young fish swim freely. If the male is removed too soon, the young fish will fall to the bottom and die. At this time, the males should be fed liberally with white worms so that they will not be hungry enough to eat the eggs. At times they will turn cannibalistic in spite of all precautions you may take. Never breed more than one pair of Labyrinth fish in one aquarium as the males will usually kill each other, if you place two in an aquarium for breeding purpose. *Paradise fish* are hard to keep in pairs as they fight a lot. However as soon as you keep a dozen or more in a tank they usually get along better. The various kinds of *bettas*, such as blue *bettas*, *cambodia* etc., are peaceful when kept with other fish, only males fight and for this reason never more than one male should be in an aquarium.

Characins

This comprises a group of tropical fresh water fish native in all parts of the world. Most varieties lay their eggs on bushy plants such as *Myriophyllum*, and water hyacinth roots. Most all of the eggs laid by these fish are adhesive, except the *Danio Rerio*, *Danio Analipunctatus* and *Danio albolineatus* which lay non-adhesive eggs. The eggs are fertilized immediately after they are laid. The fish can be seen in very beautiful colors dashing through the aquarium especially dashing around bushy plants. Most all of these eggs deposited by Characins will hatch in about two days. The young should be fed on *Infusoria* until they are large enough to eat finely screened daphnia or finely powdered food. *Rasbora Hetramorpha* deposit their eggs on the underside of the *cryptocoryne* plants and swim up-side-down while laying their eggs. They pay no attention to their eggs or young if fed properly, and if kept in large aquariums of at least 25 gallon capacity well planted with *vallisneria* and *cryptocoryne* plants.

How to Determine the Sex

The live bearing tropical fish are easy to tell apart. The males always have a longer stomach

fin than the females. The various points to be observed in order to determine the sex on egglayers are following. The males are always under normal coloration more beautiful than the females. The bodies of males are more slender and as a rule thinner. In many cases fins, especially dorsal fins, are longer. All of the nest builders are easy to tell apart as the males have much longer fins and tails than females. The cichlid males have longer and pointy dorsal fins.

DISEASES

Most diseases are more easily prevented than to correct. Good balanced conditions are necessary in order to keep fish in good health. While some diseases are more common than others, very little is known about some of them, and some diseases are almost impossible to cure.

The most common diseases are fungus and tailrot. Fungus is a cotton-like growth on the fish. This should be cured with a fungus remedy. Tailrot, also, is easily cured with a fungus remedy. A salt cure can also be recommended. Most people have the impression that by giving a fish a bath in salt water, a cure can be effected. This is not so. If a goldfish has fungus and lies lifelessly on the bottom of the bowl, and is put in a salt bath, it seems to swim around and become quite active, as if by magic. The reason for this is that the salt irritates the sore skin of the fish, and therefore the irritation makes it swim.

SALT TREATMENTS

A salt bath can be made effective if a fish is kept in same for about a week. In giving salt baths, use one ounce of common rock salt to the gallon of water. For best results use our fungus remedy. Each bottle contains complete directions for use. It may be well to state right here that conditions creating this disease should be also taken care of and eliminated in order to make the cure permanent.

INDICATION OF SICKNESS.—There are various points which show indications of sickness. When fish are sick they keep their fins folded, and are inactive, and lay lifelessly on the bottom, and refuse to eat. A permanent salt treatment, using one ounce of salt to the gallon of water should be put into effect or use the regular fungus remedy. It is of great importance to leave the fish in the salt or fungus remedy solution for at least one week. A temporary salt bath is worse than none at all. Other diseases affecting fish are the following: Dropsy, Air Bladder trouble, Blood-shot fins, and a thread-like disease.

DROPSY

Dropsy is indicated by the scales of the fish standing straight out, and a swelling of the body. A cure for dropsy is almost impossible. Dropsy to some extent can be blamed on improper feeding, and in some cases can be more or less a form of constipation, in which case it is best to put an ounce of epsom salt in the bowl to the gallon of water.

AIR BLADDER TROUBLE. The air bladder trouble is created through sudden temperature changes. If you change the water in the fish bowl, and the water is warm, and you put in fresh water, which is much colder, the fish becomes chilled, and the air bladder may discontinue to function. They will either float on the top of the water, or stay near the bottom.

If the fish floats near the surface of the water the air-bladder is filled, and the fish is unable to release the air. On the other hand, if the fish stays on the bottom and is unable to rise to the surface the air bladder has not sufficient air to raise the fish to the surface. The prevention of sudden temperature changes is the only guard against this disease. Very little, if any, cures are known to experts, and it is a condition which may be correctly described as incurable. The best cure to be recommended for this disease is a shallow water treatment, that is, by keeping the fish in about two inches of water, and giving it plenty of swimming space.

TAILROT. This disease, or condition is caused by injury to the fins or tails of the fish, and if they once get the injury the fins and tails keep rotting off, this also may be caused by turtles in the pool with the fish, which may chew on the tails, and also it may be caused by one fish biting another one. This can be treated with one ounce of rock salt to the gallon of water or the regular fungus remedy treatment.

BLOODSHOT FINS. The bloodshot fins are heavy blood veins in the fins, and this can be created through sudden temperature changes, and also through injury. Use the salt treatment as described.

THREAD DISEASE. This disease is comparatively new. This has also not been reported or investigated prior to 1931. The fish when affected with this disease, have small quarter inch white threads, similar to small prickles, which protrude from the body. This disease at times will cover the whole fish. It is a parasite that reproduces itself very rapidly.

Very little if any known cures have been described or recommended for this disease. The surest way to eliminate this disease, is to pick all these parasites off the fish, and clean the pool thoroughly. This thread-like disease occurs mostly in overcrowded outdoor pools.

FISH LICE. Perhaps the fish louse gives the average fish fan more trouble than any other disease or condition. They multiply very rapidly. While their eradication in small aquariums and bowls is a simple matter in picking them off.

Tropical fish fanciers are not troubled with fish lice they affect mostly goldfish only. The fish lice tablets we list in this book are the most effective remedy in outdoor pools. Also *Gambusia affinis* a small fish which can be procured at 50c per pair are fond of them, eat them and in time eradicate them. At least 6 pair of these should be put in a pool to be effective of good results.

The fish louse has a transparent appearance, except for the legs and eyes, and stomach region.



The illustration shown was taken from life, and is an exact illustration of how it appears attached to the fish.

Fish Louse
(Life Size)

FISH REQUIRE OXYGEN

Plants produce oxygen and require carbon dioxide; the fish require oxygen, and throw off carbon dioxide; therefore, if you have the right amount of fish and plant life in a body of water you have created a balanced condition, which is beneficial to both plants and fish. A fish bowl so balanced needs very little change of water, and most likely you will only have to add water to make up for evaporation. Once in a while, when the

sides of the bowl become green the entire bowl should be cleaned, and when this is done, it is always best to save some of the old water from that bowl instead of taking all new water.

MOST WATER PLANTS PRODUCE OXYGEN.

There are quite a number of good aquarium plants, and we will name the most practical and oxygenating producing plants. Anacharis, also known as Elodea, is perhaps the most practical oxygenating producing plant for a fish globe. In most stores this plant can be secured, tied in bunches, at 10c per bunch.

Sagittaria is also a very good oxygenating plant; however, they cannot be used in small goldfish bowls. Bowls with two- or three-gallon capacity are



Anacharis

satisfactory for this Sagittaria Sinensis. In order to root this plant, at least one and one-half inches of clean river sand, not gravel, should be placed in the bottom of the bowl. It is also practical to use a plant pot filled with sand in which to plant certain varieties of aquatic plants.



Sagittaria Sinensis

CABOMBA. Cabomba is also known as Washington Grass. It is one of the most beautiful of aquarium plants. The goldfish will also eat Cabomba, and it is a very good fish moss to keep in the bowl, as there is a certain amount of food value in this Cabomba that cannot be found in prepared food.



Cabomba

VALLISNERIA. Vallisneria is best used in tropical fish aquariums, in which there are small tropical fish, or it can be used with very small goldfish, as goldfish will also eat this Vallisneria. For tropical fish aquariums, however, this Vallisneria has no equal. Plant this plant in about one and one-half inches of sand and keep the bowl in a southern or eastern exposure, where it gets a little direct sunlight. This Vallisneria grows by runners, and also reproduces through seeds, but the best process of propagation is through runners.



Vallisneria

BREEDING GOLDFISH

Breeding goldfish is easily accomplished in outdoor pools. They prefer to spawn on bushy plants. One of the best plants for spawning pur-

poses are the water hyacinths. Goldfish deposit their eggs on these roots in large numbers, and the eggs should be removed after spawning. The eggs will hatch in about four or five days, and the young fish should be fed on infusoria.

Infusoria is best produced by placing fresh lettuce leaves in glass containers and let this decay, and then feed this infusoria, by pouring at least a quart of water in the tank containing fish every day.

Goldfish are best bred in outdoor pools, and very little success is expected by breeding goldfish indoors in aquariums. The sex on goldfish can easily be told in the Spring of the year about May, when the females are ripe and full of spawn, and when the males show little white spots on the gill plates. The spawn is about the size of a pinhead, and has a milky transparent color.

FEEDING YOUNG GOLDFISH

After the young goldfish are ten days old, they can be fed on live daphnia or finely powdered food. Also the yolk of an egg which is sifted through a fine strainer is greatly relished and makes them grow very fast. Goldfish mature if kept outdoors, when they are about one year old, and the average size of a one-year old goldfish will be about 4 inches.

The average life of goldfish can be considered at about six years. It is known that some goldfish have lived more than 15 years. The fancier types of goldfish do not get nearly as old, as the commoner varieties.

BELDT'S FUNGUS REMEDY

50 cents per bottle postpaid

Directions for use.

Four to five drops per gallon of water

There is one disease that the fancier of tropical fish fears and that is ichthyophthirius, commonly known as ich. Symptoms before appearance: The fish keep their fins folded and stay near the bottom, they sometimes wiggle in one place as if they are unable to move and at times scratch themselves on the sand and against plants. Under close observation small microscopic white dots will be noticed on the fins, the disease is very contagious and it is useless to separate those that seem affected as the balance in same tank will eventually all get it unless the whole aquarium affected with this disease is treated with "Fungus Remedy". Its use is simple and works like magic. Four drops of Fungus Remedy are added per each gallon of water in the aquarium. A cure is effected in two or three days. The color of the water in the aquarium will be a slight tinge of red. The same strength is used on all other diseases which it readily cures, such as fungus, tailrot, sore spots, torn fins, etc., on gold and tropical fish. Goldfish which have had fishlice should be placed in this solution, especially the fancier veiltail types. The lice have to be picked off by hand which leaves a small hole in the fins, this may turn into fungus, but can easily be prevented by the use of "Fungus Remedy".

Should the solution not affect a cure in three days, it is too weak and a little more should be added.



Infusoria

AQUARIUM PLANTS



Miriophyllum

Spatterdock

Cabomba

Vallisneria

Ludwigia

The health of the fish in the aquarium depends on the plant life therein to a large extent. A healthy plant growth will produce strong and vigorous fish. Vallisneria, Sagittari and Anacharis are the best oxygen producing plants and 50% of plants used in an aquarium should be these strong oxygen producers the balance may be the less oxygen producing and more ornamental plants, such as Spatterdock, Cabomba, Ludwigia, etc.

SPECIAL ORNAMENTAL PLANT COLLECTION



Philodendron	\$0.25
Variegated Philodendron	0.25
Japanese Evergreen	0.50
Umbrella Palms	0.35
Complete as illustrated, all four plants only	1.25

	Each Dozen	100
Vallisneria (Italian)	\$ 0.40	\$2.50
Vallisneria Gigantea (Italian)		
2½ to 3 feet long	1.00	5.00
Anacharis Gigantea (Cultivated Elodea), per bunch	0.10	1.00
Sagittaria Natans	.10	.75
Sagittaria Sinensis	.10	.75
Sagittaria Subulata, the dwarf variety. The narrow dark green leaves grow about 4 inches long	0.35	2.50
Potamogeton, A pretty foliage plant similar to Ludwigia with longer leaves	0.15	1.50

Floating Plants for the Aquarium

	Each Dozen	
Pistia Stratiotes (Water lettuce)	\$0.15	\$1.50
Waterfern	0.10	0.60
Salvinia, per portion	0.25	
Duckweed (Lemna minor), per portion	0.25	
Water Hyacinth (Eichhornia)	0.10	1.00
Parrotsfeather	0.10	1.00
Azolla Carolinians, portion	0.25	
Nymphaea Dauben, This is a small water lily which will bloom small blue flowers if kept in sunlight.	0.75	

Aquarium Plants (Continued)



No. 1, Marestail (Hornwort); No. 2, Water Poppy; No. 3, Anacharis; No. 4, Fontinalis Gracilis; No. 5, Sagittari Sinensis.

	Each Dozen			Each Dozen	
Fontinalis Gracilis , a popular plant for all around breeding purposes, it affords great protection to young live-bearers, also used for spawning all kinds of tropical fish, fairly hardy, per portion-----	\$0.50		of sand will keep the water clean (Flowers Yellow)-----	0.35	3.50
Water Poppy , this plant should be planted in small pots which contain some garden soil. A little sand, about 1 inch, will keep the water clean. Can be kept in aquariums all year round, but should never be planted more than 8 inches below surface-----	0.15	1.00	Cryptocoryne Plants -----	0.35	3.50
Hairgrass , a dwarf aquatic, the leaves of which are light green and rounded, about 4 inches long, per portion-----	0.50		Cabomba (Washington Grass), a popular aquatic with fan shaped leaves per bunch-----	0.10	1.00
Bladderwort (utricularia minor), per portion-----	0.50		Myriophyllum , a fine feathery aquatic plant which is very popular for spawning egg-laying fish, per bunch----	0.10	1.00
Marestail (Hornwort) , a bushy plant which is well liked for propagating live-bearers, per bunch-----	0.10	1.00	Ludwigia , a very ornamental aquatic plant with round leaves, the undersides of leaves are red, per bunch-----	0.10	1.00
Spatterdock , one of the most ornamental aquatic plants, foliage light green. The plant grows from a root similar to horseradish leaves, about 8 inches long-----	0.15	1.50	Cabomba Rosefolia (Red Cabomba), a very red foliage, otherwise similar to Washington Grass, per bunch-----	0.20	2.00
Frogbit , a similar plant to water poppy, the nymphae-like leaves float. It propagates by runners. Should be planted in pots which contain some garden soil, a cover of 1 inch			Ludwigia Glandulosa , a new Ludwigia of light green foliage, very hardy and ornamental. Per bunch-----	0.15	1.50
			Red Myriophyllum , similar in foliage to the old variety, except that the color of foliage is distinct red. Per bunch----	0.15	1.50
			Large collection of assorted aquarium plants, enough to balance 10-gallon aquarium, sent postpaid anywhere in the United States for -----		1.25
			Crystalwort , a beautiful formation of light green crystals which float near surface, per portion-----	0.50	
			Nitella Gracillis , a beautiful plant with fine deep green foliage, ideal for breeding, per portion-----	0.50	

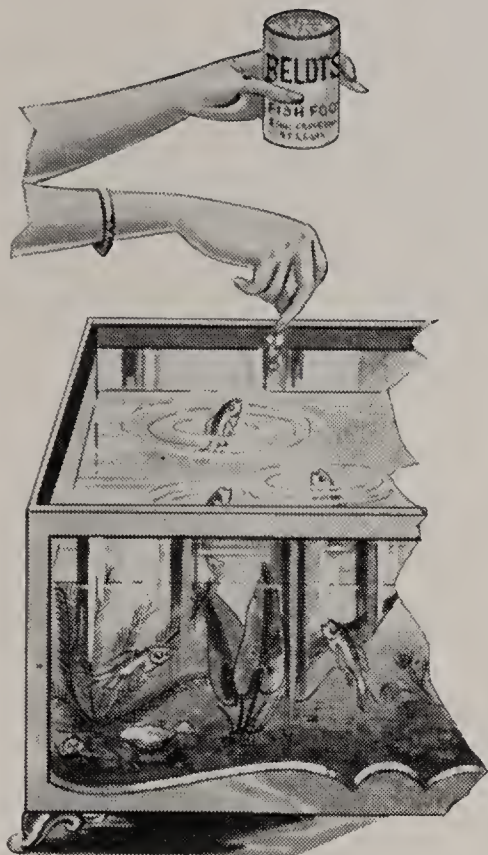
Fishfoods

A good fishfood is essential to keep the fish in good health. Silver Brand Fishfood will settle the question. The best money can buy, the finest Tropical Fishfood on the market today. It is sold in cans 3¾ inches high and 2 inches in diameter. A good supply.

Beldt's Silver Brand Fishfood, prepared for tropical fish, does not contain any kind of flour or meal in any form in order to produce quantity instead of quality

	Per lb.	Per Can
Silver Brand, medium, for larger Tropicals, Scalare, etc. -----	\$1.50	\$0.50
Silver Brand, fine, for Guppyi, Platy, Danio, etc. -----	1.50	0.50
Silver Brand Goldfish Food -----	0.75	0.25
Dried Daphnia (pure) -----	2.75	0.35
Dried Shrimp -----	0.75	0.25
Ant Eggs -----		0.35
White worms (Enchytra per portion) -----		\$1.00

To propagate white worms, fill a small box about 12 inches square and 8 inches deep with good garden soil to a depth of 5 inches, keep a piece of slate or glass on top to keep soil from drying. Keep dirt moist. Feed mashed potatoes, boiled rice, bread soaked in milk. See that all food is covered with dirt. Breeding temperature best between 50 and 75° F.



Meal Worms

Per 100_ \$0.60 Per 500_ \$2.50 Per 1000_ \$4.00

To propagate meal worms, use a mixture of old flour-bran and rags mixed up and place in a box. The box must be screened to keep other bugs out. Meal worms are ideal for feeding larger tropicals, and goldfish, also all wild native fish. For smaller tropicals they should be chopped up. They are also fed to turtles, water newts, salamanders, etc.

Imported Japanese Shrimp: This imported shrimp is guaranteed to be the finest obtainable. It is a silky texture and very soft and guaranteed to be 100 per cent pure shrimp meat. Per lb. ----- \$1.25

Per can ----- .50

Beldt's Tonic Fishfood: This food has been especially prepared for fish in run down condition. It contains cod liver oil which is full of vitamin A and D. We can not recommend this food too strongly and if fed alternatively in conjunction with other foods at least twice a week, will prevent rickets which has a tendency to produce humpback fish. If your fish seem to be in a weakened condition and ailing for lack of vitamin, this Tonic will produce wonderful results. Per lb. ----- \$2.00

Large cans, postpaid ----- 0.50

Aqua-Grassycum: Remedy for sick fish, a powder which also stimulates plant growth in the aquarium and neutralizes acids. 20c postpaid. Directions on every package.



Fish Lice Tablets

A newly discovered remedy that destroys hydra and fish lice. Use one tablet for each 8 gallon of water. Gambusia affinis a small fish sold at 50c per pair can also be used to destroy fishlice in outdoor pools, they are fond of them and eat them. Price of Tablets, 10c each; per dozen 75c, per 100 \$5.00.

Beldt's Silver Brand "Laxative Fishfood". This fishfood is especially prepared to prevent constipation. Many cases of so called dropsy are nothing more than constipation. Feed just like any other food until relieved. Price 35c postpaid.

Beldt's Gold and Tropical Fish Tonic

Price Per Can 25c

This tonic may be used for sick as well as healthy fish. Its main purpose is to create pure water conditions and keep aquariums free from disease. It is a remedy for sick fish, and a good tonic for well fish. It is greatly advisable to use this tonic when starting a new aquarium. Complete directions with every carton.



Beldt Aquarium Testing Kit

Including Color Chart
Complete Postpaid in U. S. \$1.50

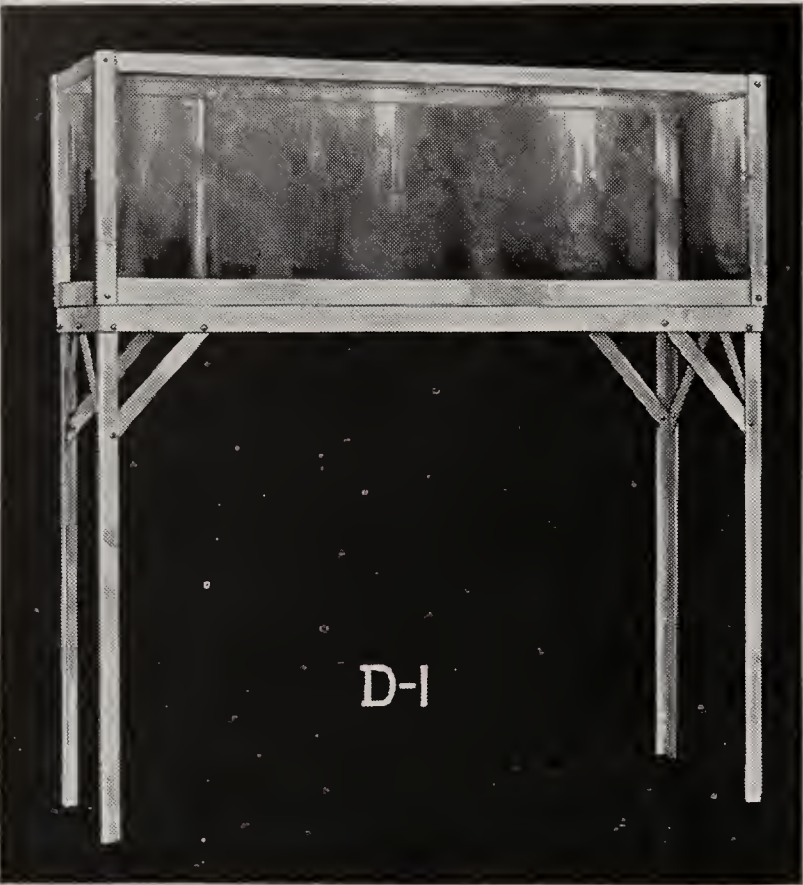
Everything you need to test and control pH; all the material you require to neutralize acidity or alkalinity in the aquarium. All guaranteed standard U. S. chemical products. Complete directions with every box.

Beldt's Fungus Remedy

Postpaid 50c per One Ounce Bottle

Symptoms: folded fins, fish wiggle seem to be unable to swim, scratch themselves on sand. white tiny spots on bodies or cottonlike growth. Complete directions with every bottle.

AQUARIUMS



No. D1—Special Dealers or Goldfish Aquarium equipped with overflow pipe and connections for running water. They are made from galvanized angle steel and are guaranteed not to rust. The bottom is made from heavy black board slate and they are made with quarter inch plate glass, No. 1 has a 1½ inch steel base and No. 2 and 3 are made with two inch base frame.

They are guaranteed against breakage in transit and all defects.

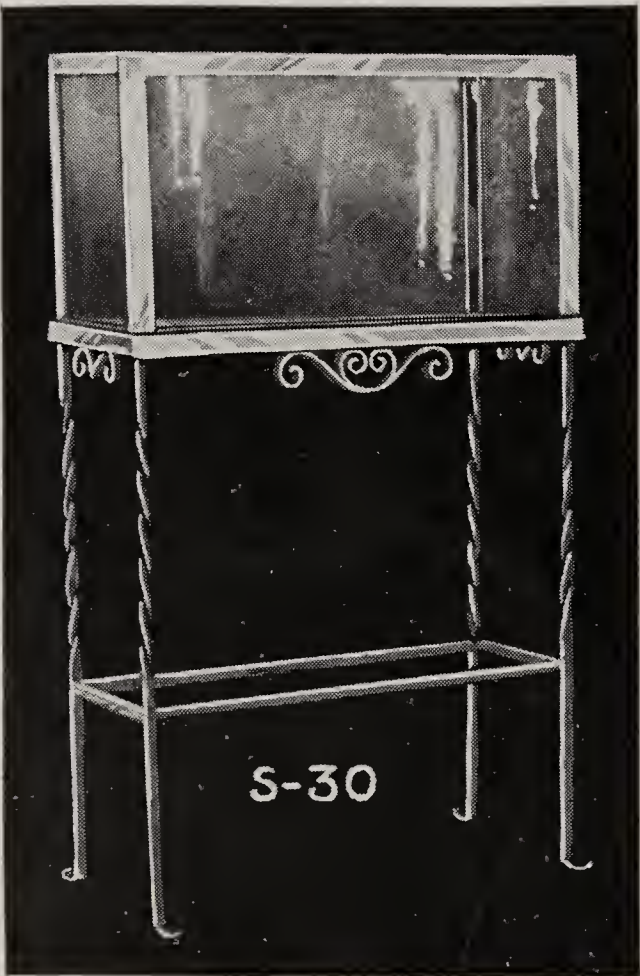
	Length	Width	Height	Capacity	Aqua- rium Only	With Stand
No. 1	35	15	16	30 gal.	\$28.00	\$32.50
No. 2	48	18	18	52 gal.	36.00	42.00
No. 3	60	20	20	100 gal.	48.00	54.00

The stands are 30 inches high and made of rust-proof heavy steel.

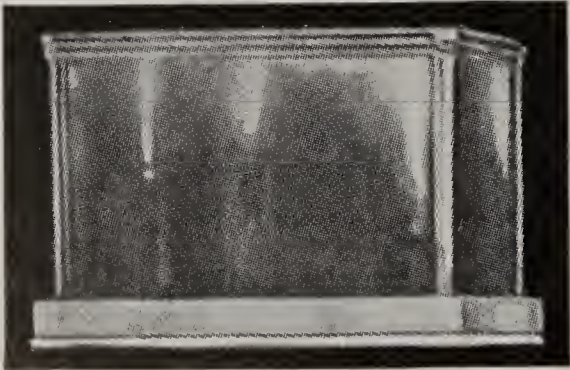
Guaranteed Die Drawn Aluminum Aquariums

Made with heavy slate bottom and clear plate glass. The stands are 28 inches high and are made of different designs all depending upon the size of aquarium. All stands can be supplied for only \$4.50 for any of these tanks.

	Length	Width	Height	Capacity	Price
No. 11	16	9¼	11	6½ gal.	\$3.75
No. 40	21	10½	13¼	11 gal.	4.75
No. 31	24½	10	14	15 gal.	6.50
No. 32	34	12	16	25 gal.	10.75
No. 33	40	15	16	42 gal.	22.75
No. 207	22	13	14	17 gal.	6.75



ROUND
GLASS
AQUARIUMS



No. 18 All Glass
Aquarium. 12" long,
9" wide, 8" deep. Price
\$3.00. Capacity 3 gals.

3/16" Plate Glass
Beveled Edge, 12" Diameter

Three Sizes

	Each
8½" High 4 Gal.-----	\$2.90
12 " High 5 Gal.-----	3.25
16 " High 7½ Gal.-----	3.50



DOLPHIN AQUARIUMS

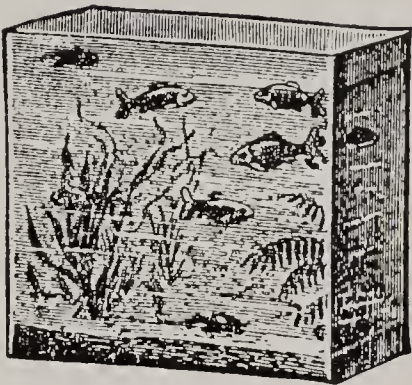
Beautiful Guaranteed Bulb Edge Cast Aluminum Aquariums

The corners are designed to have the appearance of a Dolphin. The stands are of different designs according to size of tank. All stands can be supplied for these Aquariums for only \$4.80 and are 26" high.

No.	Lgth.	Width	Hght.	Capacity	Price	
					Polychromed	Polished
52	19½	7¾	10	4 gal.	\$ 5.50	\$ 6.50
53	19½	10½	10	6 gal.	5.80	6.80
61	14	11	13	5½ gal.	5.50	6.50
62	18	11	13	8 gal.	7.80	8.70
63	24	11½	13	11 gal.	9.20	10.50
64	31	12	13	15 gal.	13.75	15.20

Imported All Glass Aquariums
(Very clear white glass)

No.	Lgth.	Wdth.	Hght.		Price
5	16	10½	11	8 gal.	\$7.80
6	14	9¼	10	6 gal.	6.90
7	12	9	9	4 gal.	4.50
8	15½	5¾	10	4 gal.	6.75

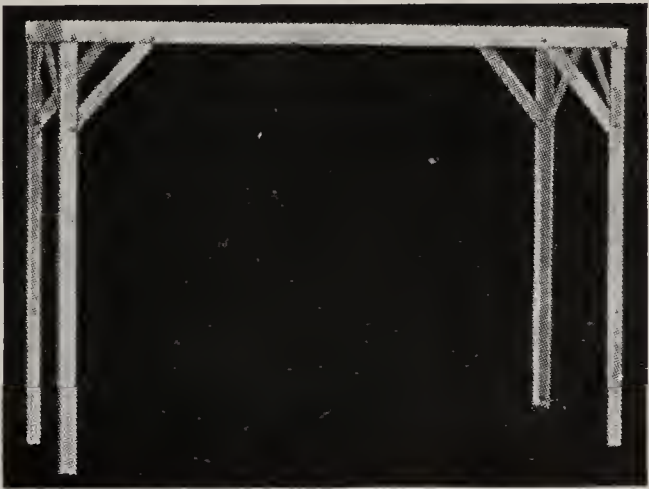


No. 70

No. 70 frames are very strong cast aluminum. Heavy slate bottom and plate glass. Finished in beautiful two color combinations of pleasing colors. These large aquariums make ideal stock or "Happy Family Tanks" and the modern design is sure to please.

No.	Length	Width	Height	Capacity	Price
71	25	15	17	24 gal.	\$ 9.25
72	36	15	17	33 gal.	15.30

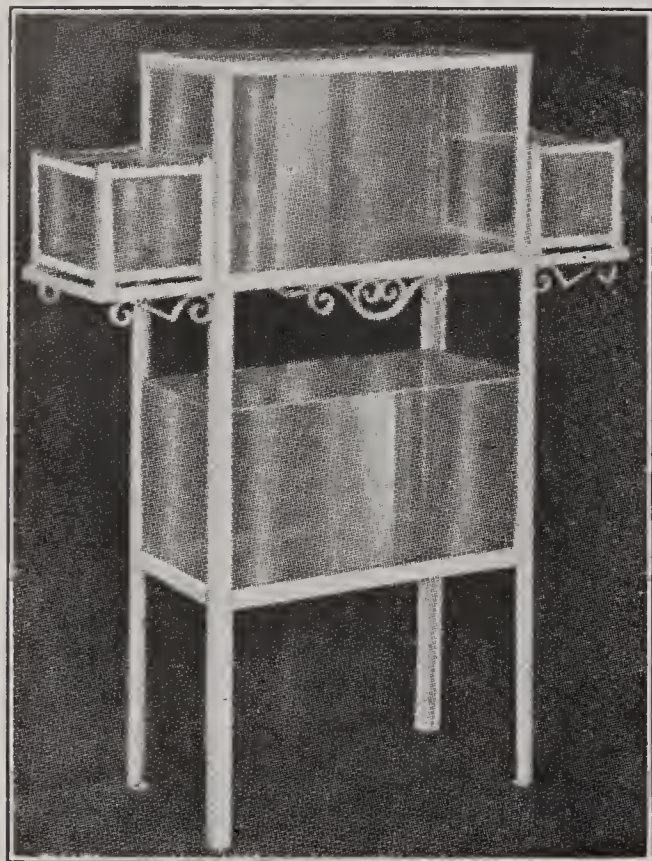
Strong ornamental welded Stands to match Aquariums for No. 71 each \$6.20 for No. 72 each \$6.85.



Angle Iron Aquarium Stands

These stands are made to order for any size tanks.

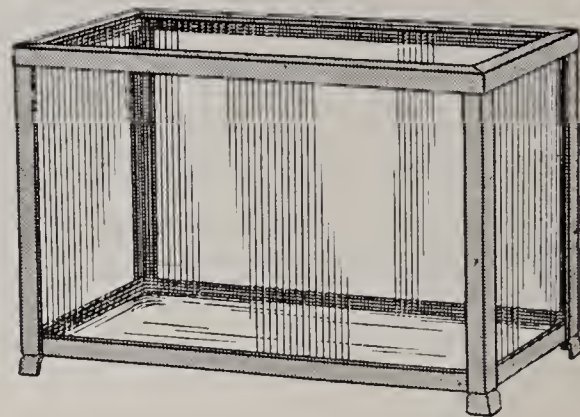
	Price
Up to 24" long	\$3.25
25" to 36"	4.15
36" to 48"	4.45
48" to 60"	5.20



No. 1 Aquariums—Deluxe Radio Finished

These Deluxe finished aquariums are the same as our No. 1 aquarium illustration. They differ in that they are finished more beautifully and they can be obtained in the same size at following prices:

No. 1-A	-----	\$1.00 ea.
No. 1-B	-----	1.75 ea.
No. 1-C	-----	3.00 ea.
No. 1-D	-----	3.40 ea.
No. 1-E	-----	6.00 ea.



No. 1 Aquariums

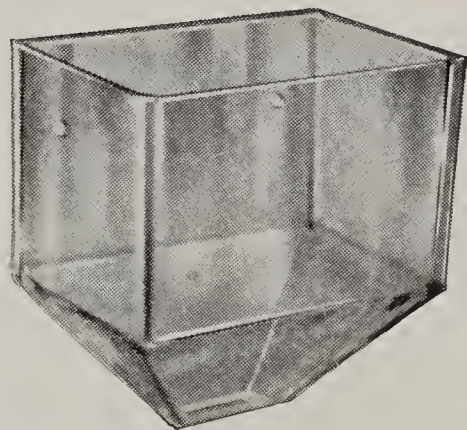
These Aquariums are made from welded steel frames finished in deep green duco. The legs are not included in measures.

	Length	Width	Height	Capacity	Price
No. 1-A	9 1/4	5 1/2	6 3/8	1 1/4 gal.	\$0.80
No. 1-B	13	7	8	3 1/4 gal.	1.50
No. 1-C	14	9	10	5 1/2 gal.	2.75
No. 1-D	18 1/4	8 1/2	10 1/2	6 3/4 gal.	3.20
No. 1-E	20	12	12	13 gal.	5.40

Fanciers Special Combination

Price Complete \$15.00

Three removable tanks. Lower tank bulb edge glass build in. This gives you two tanks for baby fish, one for egg layer and one for live bearer. Overall height 42". Floor space 24 x 9 polychrome finished. Price complete \$15.00. Total capacity 15 gallon.



No. 6202 Breeder Trap

No.	Lgth.	Width	Depth	Price
6202	5 7-8	3 7-8	5 5-8	\$1.00

Crystal Glass Only

DRUM SHAPED BOWLS

(Like Illustration)

One quart each	\$0.15
Two quart each	0.20
One gal. each	0.50
Two gal. each	1.00

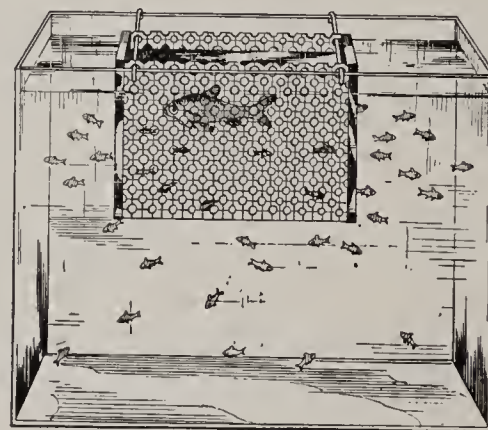


Clear Glass Oval Fish Bowl

2 gal. each ----- \$1.00



Oval Fish Bowl



Metal Breeding Cages

Square Shape				
	Length	Width	Depth	Price
Small	6	4	5	\$1.00
Large	10	4	5	1.50
V-shape				
	Length	Width	Depth	Price
Small	6	4 1/2	5	\$0.75
Large	10	4 1/2	5	1.25

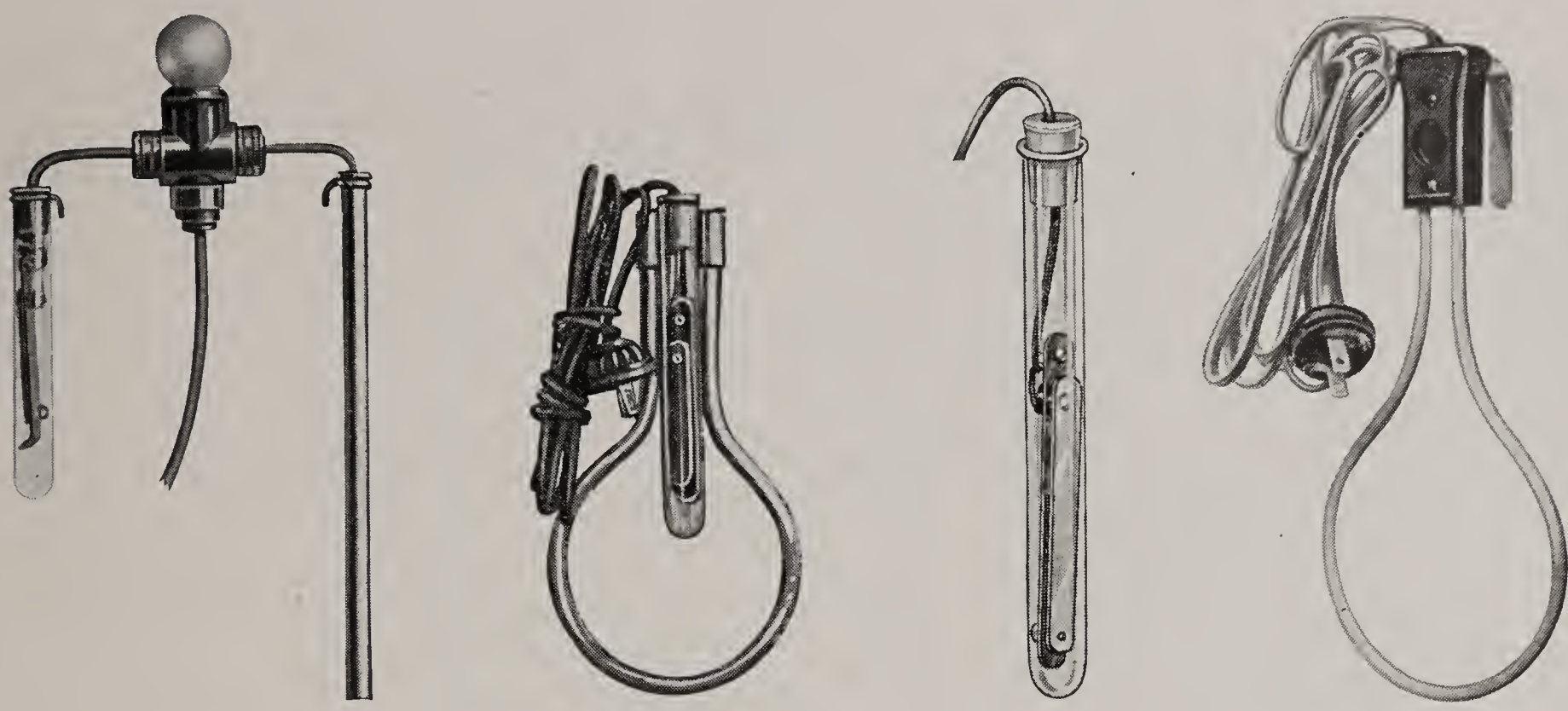


Aquarium Reflector

If turned on during the evening hours the light stimulates plant growth.

Single bulb	9 1/2 inches long	Price \$1.00
Two bulb	16 inches long	Price \$1.50

These reflectors have universal hangers fitting any aquarium. They differ slightly from illustration. They are furnished complete with bulbs, hangers, and extension cords.



No. 1
Price \$5.00
Element guaranteed for
one year

No. 2
Price \$4.00

No. 4
Price \$1.75

No. 5
Price \$1.25

Electric Aquarium Heater

No. 1 Automatic with pilot light indicator has a double socket and two heaters can be used thermostatically for two different Aquariums if desired. Each heater will heat Aquariums from 10 to 50 gal. capacity. Furnished complete with one heater. Price \$5.00. Additional heaters each \$2.40.

No. 2 Automatic for tanks from 5 to 30 gallon. Price each \$4.00

No. 4 This is only a thermostat. Can be used for any heater you now have. Price each \$1.75.

No. 5 These heaters come in single watt for

following size Aquarium. Don't forget to state gallon capacity of your aquarium or wattage desired. We can supply them as follows: for 2 to 4 gal. tanks 10 watt, 4 to 5 gal. tanks 20 watt. 6 to 9 gal. tanks 30 watt. 9 to 15 gal. tanks 40 watt. 16 to 25 gal. tanks 60 watt. 25 to 35 gal. tanks 80 watt. Any of these priced \$1.25 each.

The heating elements in No. 2 and No. 5 heaters can be replaced when burned out. Price of additional elements each 50c. Installation of elements very simple. Element in No. 1 heater guaranteed for one year.



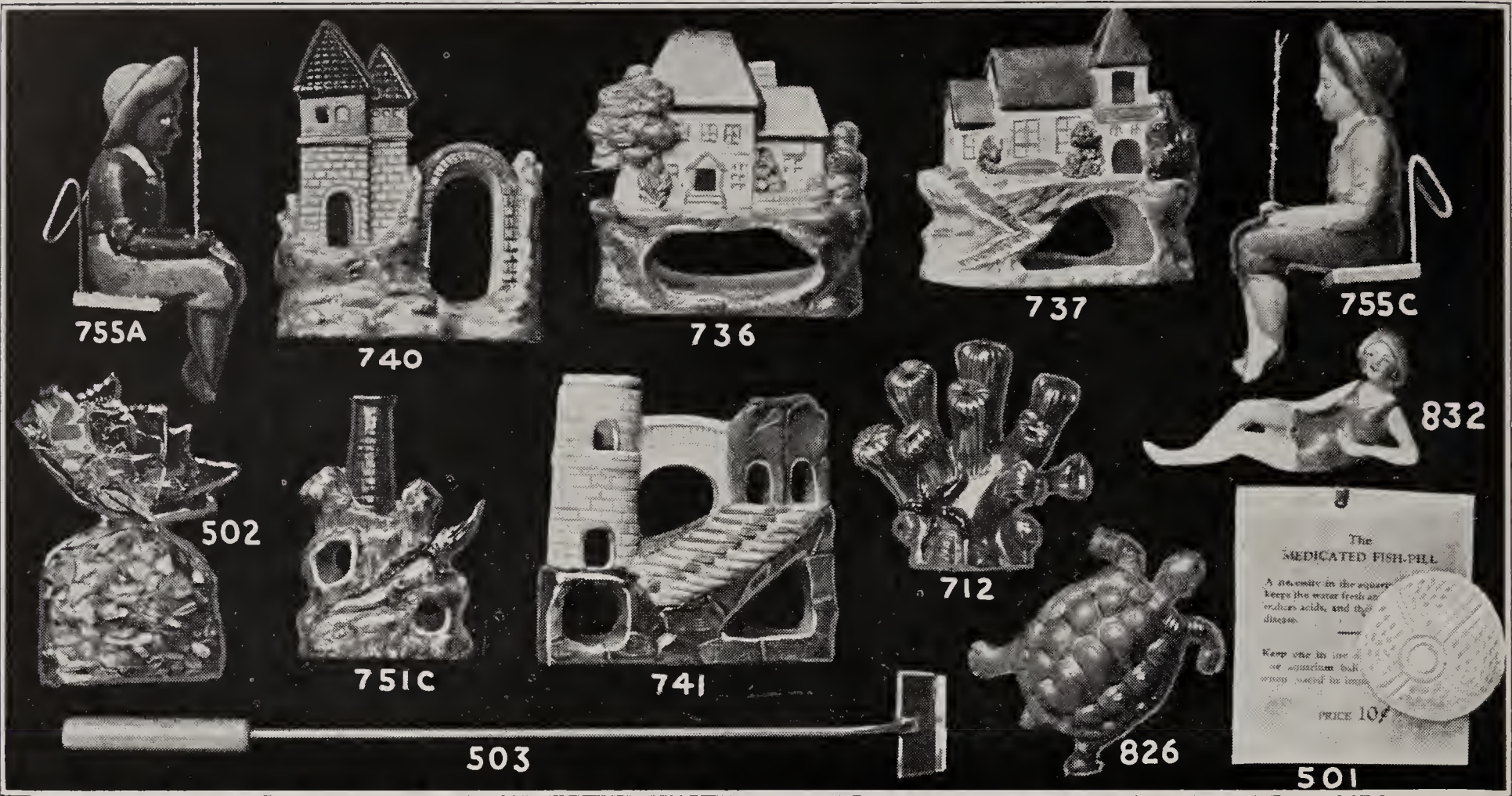
Ozark Coral

Ozark Coral is of volcanic origin and composed mostly of molten sand and tiff, the hollow spaces are filled with ocre, it is the removal of this ocre that gives the rock its natural and beautiful forms. True lovers of nature hesitate to use castles on account of being too artificial. Ozark Coral gives the desired natural effect in ornamentation.

4 in. long, 3 in. high, each.....	\$0.35
6 in. long, 4 in. high, each.....	0.50
7 in. long, 4½ in. high, each.....	0.75
9 in. long, 7 in. high, each.....	1.00
Extra fancy and beautiful formations, up to, ea.	3.00

Ozark Coral is very heavy and prices quoted are F. O. B. St. Louis. Special sizes furnished on request. All sizes quoted are subject to slight variations.

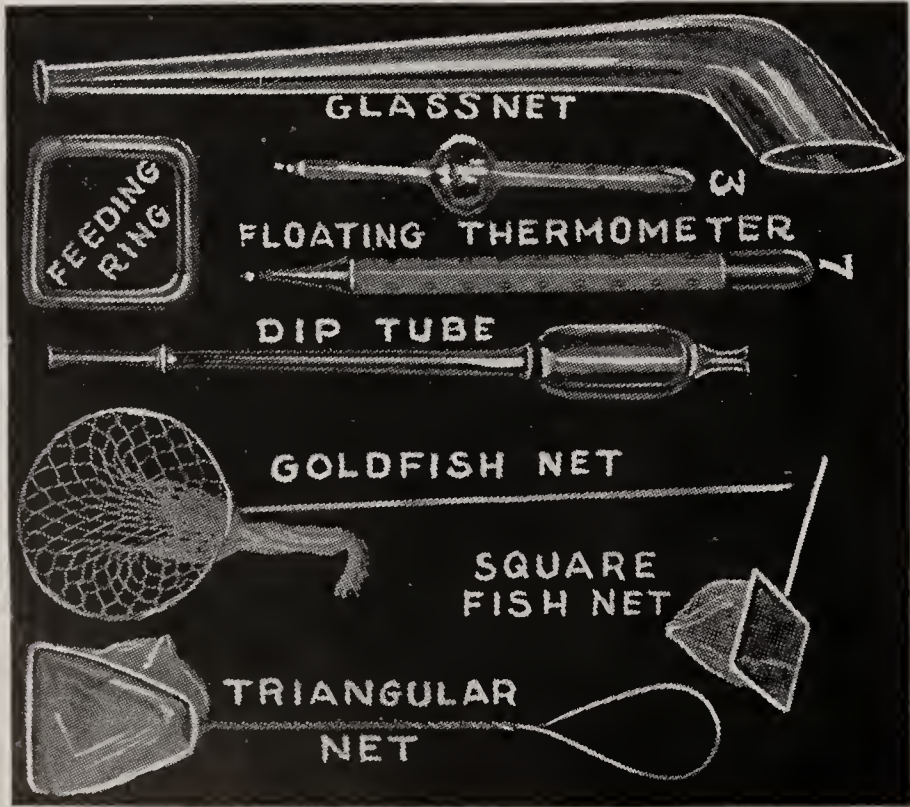
IMPORTED AQUARIUM ORNAMENTS



These ornaments are finished in beautiful natural colored china and should not be confused with cheap clay ornaments.

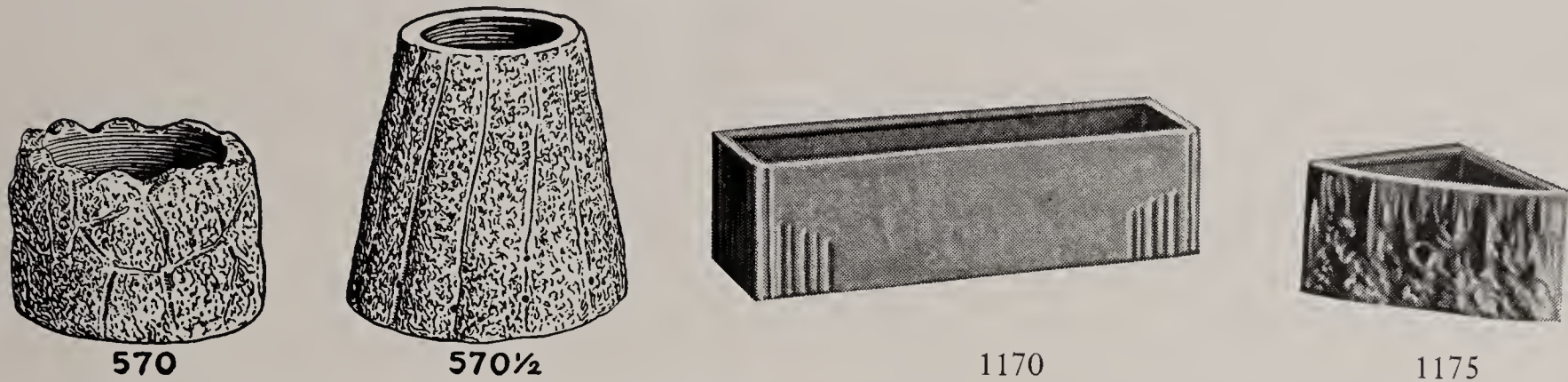
No.	High	Long	Price
755a	5 1/4	---	25c
755c	5 1/4	---	25c
751c	4	3	25c
736	4 1/2	4 1/2	35c
737	4 1/2	4 1/2	35c
740	4 1/2	4 1/2	35c
741	4 1/2	4 3/4	40c

No.	High	Long	Price
712	3 1/2	3 1/2	25c
832	2 1/4	4 1/2	15c
826	2	4	20c
503	Aquarium Scraper 12" long each		35c
502	Pearl Chips in celophane bags each		10c
501	Medicated aquarium balls neutralize water and reduce impurities each		5c
	6 for		25c
12	Large China Mermaid 7 1/2 x 2 1/2 beautiful colored, each		60c
16	(not illustrated) Aquarium brush. Handle 16 inches long, each		35c



	Ea.	Doz.
Glass Fish Net	75c	
Glass Feeding rings, 2 inch	10c	\$0.85
Glass Feeding rings, 3 inch	15c	1.00
Glass Feeding rings, 4 inch	20c	1.50
Floating thermometer, No. 3	50c	4.40
Floating thermometer, No. 7	25c	2.40
Goldfish net with wooden handle	10c	0.90
Triangular tropical net, 4 inch	10c	0.90
6 inch square tropical net	35c	3.00
Dip tubes for syphoning dirt from bottom of aquarium.		
Dip tubes 14 inch long, each	40c	
Dip tubes 18 inch long, each	60c	
Dip tubes 24 inch long, each	\$1.00	

AQUARIUM PLANT POTS



Plant Pots are a great convenience in providing soil where water plants can take root. Shipping weight, per dozen, 4 lbs.

No.	Shape	Width	Lgth	Hght	Diam.	Price
570	Round			1 3/4	2 1/2	\$0.20
570 1/2	Round			3	3	.30
1170	Square	2	4	2		.25
1172	Square	2 1/4	8	2 1/4		.50
1175	Triangular	3	4	2 1/2		.35
1176	Comes in color baked in same size as 1175..40					

Mermaids in Shells

Six Different Designs

They lend a fine charm to the whole display and are suggestive of all the fine ancient love of the sea.
Price, each-----\$0.50
Size, 3 1/4 in. high, 4 in. long



Meramec Sand for Aquariums

It is very important to use the right kind of sand for the bottom of an aquarium. Meramec sand answers this purpose. White sand packs too tight and does not allow the roots of plants to grow right, on the other hand, if sand is too coarse fish food and refuse collect among same, causing water to decompose and getting cloudy. Meramec sand is put up in the following size packages:

Size	Each
10-lb. sack-----	\$0.35
25-lb. sack-----	.50
50-lb. sack-----	.85

Prices F. O. B. St. Louis

Meramec sand is only shipped via express or freight and we do not pay express charges. These charges are collected by the express man when he delivers the sand.

Aquarium Cement

Fanciers desiring to make their own aquariums or those who have leaky aquariums will save money by sending for our aquarium cement.

Mix it with boiled linseed oil to the consistency of soft putty and apply. Boiled linseed oil that has been standing for a number of weeks should be recharged with a little Japan drier, as this drier dries out the oil when not in use for some time.

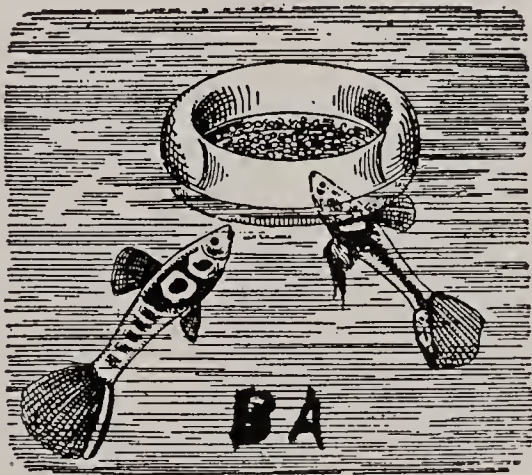
Price, per lb.-----\$0.30

Add 10 cents per lb. for postage and packing.

We also have a special gum oil which results in extra strong cement when mixed with our powder. One bottle of oil is enough for 1 lb. of cement.

Price per bottle-----\$0.25

Feeding Rings



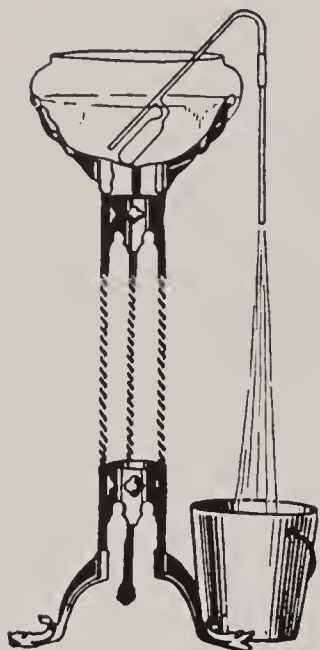
New deep round Feeding Rings

Each-----\$0.25 5 for-----\$1.00



Self-floating white worm feeder, a great improvement over the old style with cork ring.

Each-----\$0.35



Automatic Syphon

This simple little device automatically empties bowls and aquariums. Just put it in the water as shown in illustration and the water starts running on its own accord. It is much safer to carry an empty bowl than a full one.

Price, each-----\$0.75

Magnifiers

For testing Infusoria. Put a drop of Infusoria water on a piece of glass, hold light underneath. If the culture is good there should be at least 50 microbes to the drop.



Price of Magnifier, each-----\$0.75

Infusoria

When breeding egg-laying tropicals or goldfish the young after they are able to swim must be fed on Infusoria. Infusoria is microscopic life propagated best with the use of dried Valiseneria. To start your culture, put some dried Valiseneria in hot water and let cool off, then add two gallons of water. Also take a cupful of water out of an old aquarium and add this to the culture. In three days it will contain thousands of microbes. Pour some of this water into the tank containing baby fish, every day.

Dried Valiseneria, per box-----\$0.35

Special Offer

Dried Valiseneria with one
Magnifier, sent postpaid,
\$1.00

Colored Lily Pool Paint

We highly recommend Bondex Water proof Paint especially prepared for Cement walls and lily pools. After testing many materials manufactured for this use we selected "Bondex" as the best. If Bondex is mixed properly and applied according to complete directions which are furnished with every can it will last as long as the pool itself and forms a part of the pool and not merely a surface coating. It is ideal for stopping leaks on pools. Bondex contains no poisonous chemicals however on account of lime content pool must be seasoned with change of water before placing fish in same. Bondex Water Proof Pool Paints can be supplied in following colors:

OLD SPANISH WHITE, BLUE, GREEN

Price per 5 lb. can for all colors except green----\$2.50

Price per 5 lb. can, Green----- 3.00

DIRECTIONS:—Five lbs. of Bondex Pool Paint will cover 50 square feet. Sold only in 5 lb. cans and we can not supply this in any other quantity. You will find complete directions for use with every can.

Asphaltum Enamel

A new pool does not have to be seasoned if the pool is painted one coat of asphaltum Enamel. The concrete walls must be perfectly dry when applying this enamel. Just give it one good coating, let it dry 24 hours and it is ready to be filled. Black asphaltum enamel also has the advantage of keeping algae from forming on the walls. We can supply this enamel in black and green.

Per gallon, Price, Black-----\$1.00

In 5 gallon cans, Price, Black ----- 4.50

Per gallon, Price, Green----- 3.75

Per quart, Price, Green ----- 1.20

We do not pay expressage on pool paints.

Red Wood Water Lily Boxes

These boxes are shipped knocked down and can be nailed together by anyone in a few minutes. They are cut from durable California Red Wood and will last a life time under water.

These boxes also make wonderful boxes for propagating white worms. Prices do not include postage or expressage.

Size	deep	long	wide	Price each
No. 1	8"	10"	10"	\$0.85
No. 2	10"	18"	18"	1.75
No. 3	15"	22"	22"	2.80

It is next to impossible to write a book on fish and cover all the many various details that may confront all of the individual fanciers. You always run across something new occasionally that seems like a puzzle. To get to the bottom of things study the principles of the proper requirements. In most cases you will detect your mistakes. We list here questions which have been answered many times. Sometimes we receive several letters daily requesting advise on the prevention of green water, which can be prevented simply by reducing excessive light. A self addressed and stamped envelope must accompany all letters of inquiry which we are always glad and ready to answer.

Q. I made me a fish aquarium two weeks ago, but the cement is still soft. What did I do wrong?

A. We believe the oil that you used did not contain enough drier. Boiled linseed is nothing but raw linseed oil and Japan drier mixed in with the oil. After leaving linseed oil, which has been mixed with drier, stand for a long time it may lose all its drying quality, and for this reason the so-called boiled linseed oil is not the best to use for an aquarium cement. We find there is no superior to the special gum oil, and that it gives the most satisfactory and lasting results. This gum oil is listed in our catalogue, and can be supplied at 25c per bottle and is enough to mix with one pound of cement powder.

Q. I have a goldfish which floats on top of the bowl unable to balance himself. What is wrong with it?

A. No doubt, your goldfish is suffering from bladder trouble. Bladder trouble in goldfish works two ways. If the air bladder is empty, the fish lies on the bottom of the aquarium and has to make great efforts to rise. If the air bladder is full, and the fish is unable to release it, he will float on the surface and has to use great efforts to go to the bottom. In most cases they are unable to leave the surface. Bladder trouble is a disease which may be described as incurable, and is caused mostly through sudden temperature changes.

Q. In what colors does your asphaltum enamel for pools come in?

A. Our Asphaltum Enamel comes only in two colors, Black and Green. If you desire the natural cement color, we can supply you with the Bondex. This is about as good a cement paint as any that can be used for pools. It is a good water proofer and never comes off. This bondex pool paint comes in five lb. cans. One can covers about 50 square feet. What you want, is the Old Spanish white which makes a beautiful natural finish. We can supply this at \$2.50 per can. When using Bondex the pool must have at least one change of water before it is safe for fish. When using asphaltum enamel the pool is safe without this change of water.

Q. I noticed that my goldfish are frozen solid in the ice. My pool is only eight inches deep. Will they be all right when the ice melts?

A. We are afraid that you will lose these goldfish. There have been many questions regarding the possibility of fish living after being frozen solid in a block of ice. There is a certain variety of fish that hibernate during extremely cold weather, and hardly have to breath at all; however, goldfish have to breath and if the ice is frozen solid around

the fish, the fish is unable to breath, and will suffocate. We have heard many stories to the contrary. People have informed us that their fish were frozen solid in the ice and lived; however, science has proven that if fish are frozen solid in the ice, they will die. During the year 1929 and 1930 when we had the drouth in the middle West, most of the fresh water ponds were much more shallow than at other times, and the State Game & Fish Department estimated a loss of millions of game fish, which had been in shallow ponds in which the ice had frozen too deep. Any body of water must be deep enough to allow the fish to stay below the ice, otherwise, they will not live.

Q. The water in my aquarium gets green within a few days after I clean it. What causes this? Can you advise how to keep it clear?

A. You keep the aquarium in too much direct sunlight. That is the reason for the water turning green. You can keep this water clear by placing the aquarium in a slightly shadier position where it does not receive quite as much excessive sunlight. Maybe, if you just move the aquarium about a foot away from the window it will stay clear. Please note that direct sunlight is the best kind of light for the aquarium, however, if it get too much, sun the water turns green. This is, in no way injurious to fish. Many fanciers never clean the tank out because it is green.

Q. Is there a live bearing fish that can stand cold water and is hardy outdoors over the winter?

A. There is a live bearing fish by the name of *Gambusia Affinis* which is extremely hardy and is native from the Gulf of Mexico as far north as Calgary, Canada. *Gambusia Affinis* are born alive, however they do not breed during the winter months in the northern part of the country. In the vicinity of St. Louis, Missouri, all ponds and lakes are full of them, and they are used by many fishermen as minnows. They are greatly propagated by the U. S. Government as they have been found to be the most effective fish to eliminate the mosquito larvae. They will stand very stagnant water and are top water fish, continually looking for food near the surface of the water. They can be kept in any goldfish pool and for this reason, they are a great aid and will eliminate any chances of mosquito wigglers from hatching. They also eat Fish Lice.

Q. Are there any other varieties of fish that I could keep with my goldfish in a large 42 gallon aquarium?

A. There are quite a number of fish that can be successfully kept in the aquarium with goldfish. In the first place, there are quite a number of goldfish varieties. All of these varieties of goldfish such as Calicos, Moors, Shubunkins, Commets, Common goldfish, etc. can be mixed. The following varieties will make splendid additions to the goldfish aquarium *Oryzias Latipes*, *Cheatocons*, *Sail Fins*, *Cardinal Fish*, *Jordinella Floridae*, *Fundulus Macdonaldi*, *Fundulus Chrysotus*, *Notropis*, and also *Black Mollenesia*.

Q. Please tell me what to do for goldfish when they turn white.

A. If the goldfish turns white and is covered with a white slimy mass, this is white fungus, and it should be handled like all other fungus diseases. The best cure is to use regular fungus remedy, which we

have listed in this catalogue, as this is not injurious to snails or plants.

Q. I have several large bull-frogs in my pool. My neighbor told me they eat fish, is this true? What is best to prevent my pool from getting green?

A. Regarding the bull-frogs in your pool, we wish to advise that frogs are very detrimental to fish. One good-sized bull-frog can consume about 3 two-inch goldfish every day. They are able to eat relatively large fish, and consume fish nearly their own size.

In regards to preventing your pool from getting green, please be advised that green water is caused through excessive sunlight on your pool. Reduce this sunlight and the water becomes clear on its own accord. The best and most practical method of eliminating green water and reduce sunlight is through the planting of various aquatic plants and water lilies. Also, if you are troubled with green water, tropical lilies, which make far larger leaves, should be planted. If there are enough water lilies growing in a pool to cover at least 75% of the water surface, it is very seldom that a pool so planted will not stay clear.

Q. My aquarium gets full of a green slimy growth which I am unable to get rid of. I remove it at least once a week, but it keeps on growing further than I can remove it. Can I put anything in the water to kill this?

A. There is no chemical which you can use to remove Algae or to keep Algae from growing in an aquarium without killing the fish. It is best to clean the whole aquarium entirely and place it in a position where it does not receive as much excessive sunlight, and the algae growth will be reduced to a minimum.

Q. Last week I cleaned my pool and when I put the fish back in the water, they became full of tiny air bubbles. I am afraid they will get fungus. Please send me a bottle of fungus remedy and tell me what causes this condition.

A. Fresh water contains a very large amount of oxygen, especially in cold weather. By placing the fish directly in fresh water after filling an aquarium or a lily pool, the surplus oxygen in this body of water will adhere to the plants, the sides of the pool or aquarium, and it will also adhere to the fish. Fish, at times, become so light through the adherence of these air bubbles that they float near the surface unable to help themselves. Never use fresh water. It is best to let fresh water stand at least 24 hours before placing fish in same. There is a great chance for fish, being thus affected, to get fungus and other skin diseases.

Q. My Swordtail female had 2 litters of babies in the last 6 weeks, all born dead. What causes this? A friend told me that the water is too deep which causes them to drown, is this true?

A. There are many cases among Viviparous Killifishes, whereas young may be born undeveloped and immature in which case they are born dead. In many cases a yolk sack, having the appearance of an egg can be seen in the center of the body of these small baby fish. It is not true that fish born strong and healthy will drown. However, there may be a possible chance of saving young tropical fishes which are born in a weakened condition if a lot of plant life is provided near the surface so that the young fish can lie near the water surface.

Q. Could you tell me what is the matter with goldfish when their tails start getting white, and is there any cure for it?

A. When the tails on goldfish begin to get a white scum on them, it may be a case of Fungus or Tail Rot. A good cure for Fungus and Tail Rot is Fungus Remedy which cannot be excelled for these diseases. Tail Rot can be cured with a solution of plain sea salt, one ounce to each gallon of water. The fish should be left in this solution until the sore parts are all healed up which should be at least eight days. All plants and snails should be removed as the salt solution is detrimental to them and will kill them.

Q. What are the chances of an amateur raising some Angel Fish in a home aquarium?

A. The chances of anyone raising Angel Fish are fairly good. The principle requirements are a temperature of 80 to 85° F., a fairly good-sized aquarium so the fish have ample space to swim, a well planted aquarium planted with *Sagittaria Sinensis* and *Cryptocoryne* plants, also *Vallisneria* should be used in planting an aquarium to be suitable for breeding Angel Fish. They must receive an abundance of live food. Do not expect to raise Angel Fish unless you can feed the live food at all times. Quite a number of unusual experiments have taken place. In one particular case, a fancier did not even know he had young Angel Fish in the tank until he saw them about two weeks after spawning. In order to get a good mated pair, secure at least 10 young fish, raise them up to breeding size, and you will find out of 10 at least one pair suitable for spawning.

Q. Please advise me the cause of my plants in the aquarium being spindly and of a sick color. They have plenty of sun light, but seem to grow too fast. I had a water poppy that grew two inches in one night, also other plants seem to grow too fast. Please give me full particulars.

A. It may, perhaps, be that your aquarium receives too much sunlight, or that you may not have the right kind of sand on the bottom of the aquarium. As a rule, the conditions which you describe are created by using the white sand on the bottom of the aquarium. If you plant a water poppy in an aquarium and the leaves do not come to the surface, they will stretch as much as 6 inches over night to reach the surface. If there is too much sunlight, the plants will not have a good dark green color, but will have a pale color. If this is the case, it would be, perhaps the best to paste a piece of paper over the aquarium and keep out the sunlight. It is also important to test aquariums for acid conditions and neutralize the water, also the plant food, known as Aqua Grassycum can be added to this aquarium water. This chemical will dissolve quickly and neutralize acidity and impurities, and also acts as a fertilizer to plant life in the aquarium.

Q. I have a goldfish which lays on the bottom of the bowl and cannot swim. What is wrong with it, and please advise how to prevent this.

A. If a goldfish stays on the bottom of the bowl and has to use great efforts in reaching the surface, this fish has bladder trouble. That is, the air bladder does not function properly. Very few, if any remedies can be used for this except leaving the fish in shallow water and, perhaps, use an ounce of rock salt per gallon of water. It is caused through quick changes of temperature. Perhaps at some time you have taken the fish from warm water and placed them in fresh cold water.

Q. How long does it take for turtle eggs to hatch?

A. There are many varieties of turtles and it takes turtle eggs various times to hatch in various parts of the country. It all depends also on the size of the eggs. Larger turtle eggs take as long as 12 weeks to hatch while the ordinary swamp turtle, native to Louisiana, hatch in about 4 weeks. This of course, depends also on weather conditions.

Q. I have two pools. I keep my goldfish over the summer months in one, and in the other pool, the tropicals. I have been troubled for the past two summers with fish lice in the goldfish pool, but have never seen them in the tropical fish pool. Can you tell me how to get rid of them?

A. The reason you do not have fish lice in the pool in which you keep your tropical fish is because tropical fish are quick and eat small insects and they also eat fish lice. A tropical fish fancier is never bothered with fish lice. We have fish lice tablets listed in our catalogue which can be used to eradicate these lice. Complete directions can be found elsewhere in this catalogue. It is a good idea to place some *Gambusia Affinis* in a goldfish pool infested with fish lice as these *Gambusia* will soon eat them. *Gambusia* fish are also hardy and can be left in the pool during the winter the same as goldfish. As they breed very rapidly, in time, these fish should be thinned out.

Q. Please advise me what to use to stop a pool from leaking. My pool is 9 feet wide by 12 feet long by 4 feet deep. I have had a concrete man working on it, using a concrete mixture, but he hasn't been able to stop the leak. I will appreciate it if you will advise me what to use.

A. If the pool is cracked, that is, if the walls are cracked all the way through, you cannot do a satisfactory repair job. You will have to tear the whole job out and then rebuild it. If it is only a leak created through porous concrete, it may be that you can stop this with a good finishing coat of concrete of about one inch thickness. You did not advise how the pool was built. If it was built from solid concrete, a pool 9x12x4 feet should have at least a six-inch wall, and should be reinforced with an iron rod near the freezing line to keep it from expanding and breaking.

Q. I have noticed the past few days that there is a white mould along the backs of several goldfish in my pool. I have read about fungus. Can this affect fish in outdoor pools?

A. Please be advised that fungus will affect fish in outdoor pools as well as indoors if there is a condition strong enough to create fungus. As we have already discussed this fungus disease, we wish to call your attention to the various information given in previous articles dealing with the cure of this disease.

Q. I noticed some fish eggs in my aquarium attached to the plants which I removed to a separate bowl. They are now two weeks old. How long before they hatch? They seem to be glued together in a mass of jelly.

A. We are of the opinion that the eggs which you removed are snail eggs, as snail eggs are together in a mass of jelly. There are from 15 to 50 eggs to a nest. Snail eggs hatch in from 3 to 6 weeks all depending on the amount of sunshine and temperature.

Q. Can you tell me what would cause a film on the surface of the water in a galvanized tank in which I am wintering my goldfish?

A. Any kind of a galvanized receptacle will cause a white film or scum on the surface of the water if the water is kept in it longer than two days, as an acid condition is created when the water comes into contact with the metal. This condition is injurious to fish. Before using a galvanized tank of any kind for fish, permanently, give it two coats of Asphaltum Enamel.

Q. What causes water to get milky?

A. Milky water, in most cases, is caused through over-feeding, or feeding the wrong kind of food, or keeping a lot of gravel, fancy-colored shells, etc. in the bottom of an aquarium. Fish food which lodges between these coarse materials to which the fish and snails have no access, decomposes and creates this condition. As a rule, when water turns green, it will be noticed to be milky for several days, and eventually takes on a dark green color. This is not caused by over-feeding.

Q. How can I prepare a galvanized tub to make it safe for keeping goldfish in same?

A. All kinds of metal receptacles should be condemned for keeping goldfish in. They are, even if finished properly, not nearly as practical as an old seasoned wooden trough, or a concrete pool, or an aquarium. With fair success, goldfish may live in metal containers such as galvanized tubs, if they receive two good coatings of Asphaltum Enamel. As this enamel is non-injurious to fish, these tubs can be filled up with water and stocked with the fish one day after the last coat of enamel has been applied.

Q. What kinds of snails are hardy and can be left in the pool all winter?

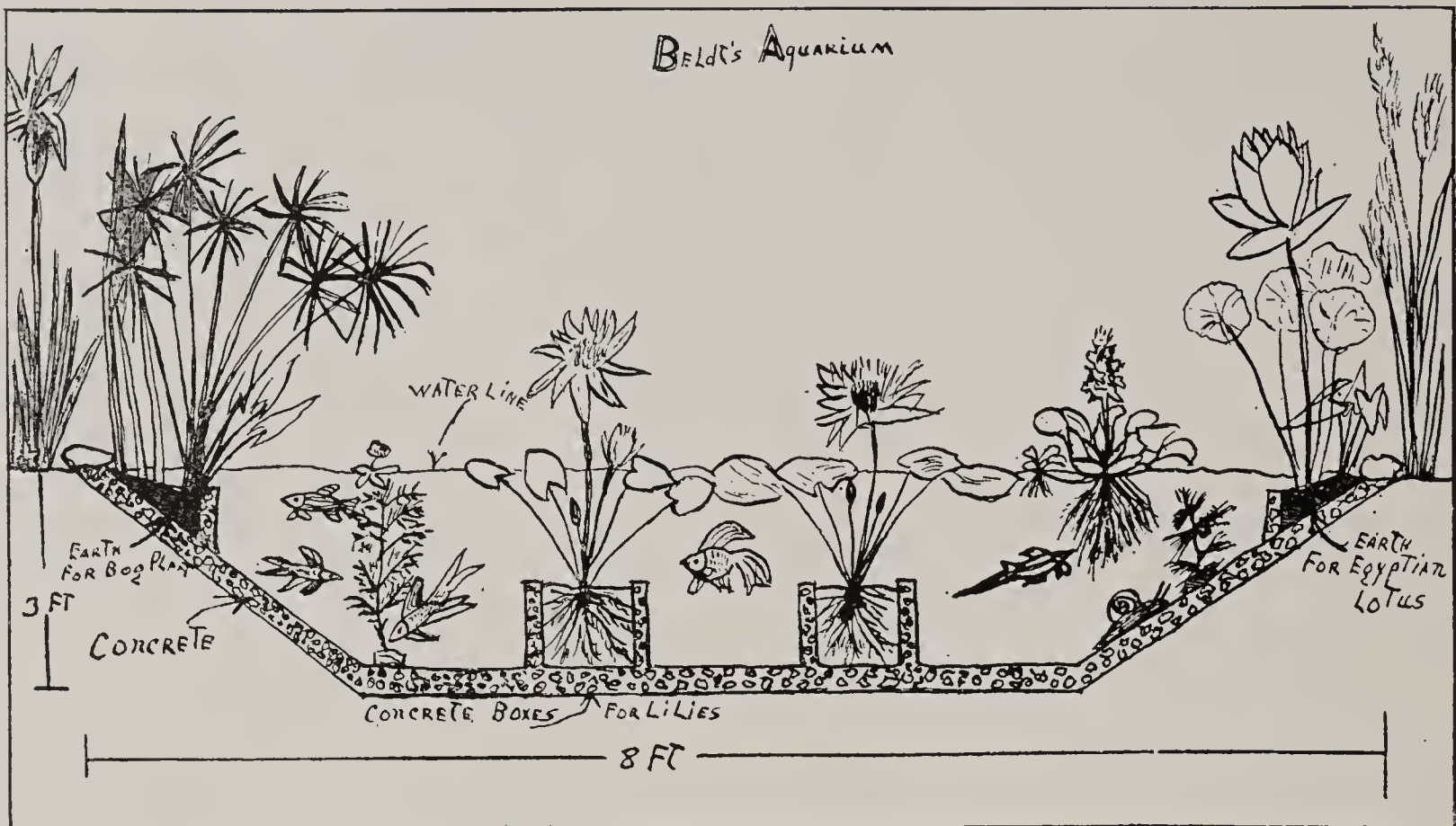
A. The following varieties of snails are hardy, and can be kept in the pool all winter: Japanese snails, African snails, Trumpet snails, Black Ramshorn snails, Red Ramshorn snails, Australian snails, and the common Pond snail.

Q. How many plants, what kind, and how many snails and fish do I need to balance a ten-gallon aquarium?

A. Unless you know just exactly how large the fish are, it would not be possible to advise how many can be kept in a ten-gallon aquarium. In order to balance a ten-gallon aquarium properly with plants fish and snails we would recommend the following: If the aquarium is intended for goldfish, 4 *Sagittaria*, 2 bunches *Anacharis*, 10 two-inch goldfish, or 5 four-inch goldfish, or 20 one-inch goldfish. In other words, do not use more than two inches of fish to the gallon of water, and in all measures the tails must be included. The size should not exceed 10 two-inch fish measured from the nose to the end of the tail, three Black Ramshorn snails, two Japanese snails, and 1 Clam.

For tropical fish aquarium of ten-gallon capacity, we could recommend the following: 2 dozen *Vallisneria*, 2 *Sagittaria Sinensis*, 1 bunch *Myriophyllum* or other finely growing plants for new-born, young fish, to hide in, 4 Red Ramshorn snails, 4 Black Ramshorn snails, 1 African snail, 1 Trumpet snail, and 2 Japanese snails. In selecting the tropical fish for this aquarium, please keep in mind that it is best to mix fish of uniform size. If you rather like the smaller tropicals, you can mix all various smaller tropical fish, or if you do not like them too small, mix the larger varieties.

HOW TO BUILD A LILY POOL



The important points are the following: location, depth, expense, and size.

The location should be as much as possible away from very large trees. Water lilies thrive best where they receive a lot of sun.

A Pool Three Feet Deep Is Best

The depth of a pool is best at about three feet. The goldfish live over-winter easy in a pool three feet deep and this is very important. There are quite a number of fish that get too large to be kept indoors and if the pool is shallow they have to be kept indoors during the winter months. Also all hardy lilies and aquatics may be left right in the pool over-winter.

Our illustration shows the construction of a pool such as we use extensively for propagation.

A Sloping Wall Is Stronger

The side walls are built on a slant. This keeps the walls from breaking as the ice rises as it gets thicker and therefore, there is little pressure on the walls. This is a great point to be considered not only as a safeguard against heavy freezing, but also it saves quite a bit of expense in construction. Absolutely no lumber is necessary to build these walls. The concrete mixture is poured right on the ground. It should be stiff enough to keep it from running. If the owner, however, desires a nice straight edge instead of an edge laid with rocks as our illustration shows all that is necessary is to lay 6-inch boards on top of the ground and space them in straight lines around the pool. Another frame of 6-inch boards laid inside of this completes the frame. After pouring concrete in same, a nice wall is obtained around the pool. The lily boxes can be made of concrete for permanence, or may just be wooden boxes. A retaining wall is built near edge of pool, about 1 foot deep and in this space, which is filled with garden

soil, all various bog plants, such as Umbrella Plants, Arrow Heads, Parrot Feather, Thalia, Egyptian Lotus, etc., are planted. Various hardy lilies and ornamental grasses are planted near the edge to give the pool a natural and formal appearance.

An Empty Pool Breaks Easier in Winter Than a Filled Pool

Do not empty a pool in winter time if it is deep enough. The frost never reaches to the bottom of a deep pool and the water in same is a protection. When a pool is emptied the ground all around and underneath freezes. Frozen ground expands and when it settles in the spring it may cause the pool to crack.

Fish Can Not Be Put in New Pool

A newly constructed pool must be seasoned. That is when the pool is filled with water the first time, the water absorbs the lime contained in the concrete. This is fatal to fish and their fins get ragged in several days. It usually ends in fungus (a white cotton like growth).

How to Prevent Fungus in a New Pool

Fill pool with water, let it stand one week and empty it. Repeat this and after the third filling it usually is good for fish. A pool, however, may be painted with asphaltum enamel which we can supply for \$1.00 per gallon. Asphaltum enamel dries in 24 hours and the pool can be filled, planted and stocked with fish. Asphaltum enamel also stops most slow leaks as it seeps into the porous concrete and another great quality to be considered, the asphaltum coating prevents algae or the slimy mosses from rooting in concrete. The water stays cleaner and does not get green so fast. Put it on thick. Every pool we use is prepared in this manner. We can furnish asphaltum enamel in one gallon cans for \$1.00 each. Five gallon cans for \$4.50 per can.

Concrete Mixture

Use three wheelbarrows full of gravel and two of sand. To this add one sack of cement. For a finish which should be one-half inch thick, use 1 wheelbarrow of sifted sand to 2 sacks of cement. All concrete walls and bottom should be 6 inches thick. If the sides slant no reinforcing rods are necessary.

Goldfish Feeding in Winter

If the pool is three feet deep, the goldfish, if left outdoors for the winter, should not be fed from the time the ice forms until it melts in spring. They become dormant and almost lifeless. If kept in the cellar over winter in tubs and in a cool place, feed twice a week. If they are kept in an aquarium in ordinary living-room temperature, they should be fed at least every other day, but never more than a little each day.

Cultural Directions for the Water Garden

Water lilies unlike the usual garden flowers, require no cultivation and very little attention. Once planted, they take care of themselves. A well constructed pool once planted needs no further attention except feeding fish and removing a few old lily pads that become yellow.

Hardy water lilies and aquatics, also Nelumbiums' may be left in the pool all winter, as long as there is one foot of water above the roots. In the vicinity of St. Louis 8 inches of water above the roots is plenty. In the northern parts of the country where the water freezes to a depth of 2 feet or more, the hardy lilies are taken in and stored in a cool place, the tubers are left in the growing boxes and have to be kept moist. About every three years the tubers should be divided and fresh soil should be added.

Preparing Soil

If good black garden soil is available no manure has to be used. Of course a little rotted cow or horse manure will be found beneficial. However, it should be used sparingly for if used too heavy it will cause algae to develop rapidly and also cause the water in pool to turn green. Very good results are obtained with good black garden soil only. A nice clear pool all summer is worth something and perhaps more than a little larger flower produced with the aid of manure. Hardy lilies can be planted almost any time of the year. We usually start shipping tubers about May 1 as by that time they have developed leaves and this makes it easy to get them out of ponds. Most all aquatic plants are hardy, the tops which freeze off during the winter do not kill the plants and the roots will produce a new growth early in the spring.

Care of Tub Garden During Winter

Leave the tub full of water and leave all hardy plants in same. Put boards on top and heap leaves around and above boards to keep heavy frost out.

Care of Tropical Lilies

Tropical lilies should be planted after June 1. They may be planted in large 12-inch flower pots or boxes up to 2 feet square and 1 foot deep. This all depends on the size of your pool. If it is small, use a smaller box. Tropical lilies develop in size according to the space they get. They are grown in 3-inch flower pots in the greenhouse during winter. In these small pots they do not get very large and the flowers they produce in the winter may only be 2 inches across. Whereas the same plant in an out-of-door pool during summer will develop flowers from 8 to 12 inches across.

Planting Tropical Lilies

Tropical lilies are planted the same as hardy lilies. Good black garden soil will produce a rapid growth. Of course, if clay is used it is best to work in about 20% of good rotted manure. Any kind will do, also pulverized sheep manure is very good. It is always good to put about 2 inches of sand or fine gravel on top of soil to keep the water clear. The boxes should be ready for receiving lilies and a little dirt is removed from center of box in which you place the young plant. Take care not to plant the tropical lily too deep, the crown should rather be slightly above surface. The young plant may drop all of its leaves the next few days after planting. Don't let this alarm you.

Tropical Lilies Make Very Rapid Growth and Are Best Adapted For Artificial Pools

This young tropical lily will surprise you. The growth they make is tremendous. Within four weeks after planting you will have a number of lily pads almost 12 inches in diameter and the first flower usually opens up four weeks after planting. One lily will produce about 30 to 40 flowers during the season and they bloom until heavy frost. Tropical lilies will make ideal cut flowers for the table and most of them are very fragrant.

WINTER CARE OF TROPICAL LILIES

One tropical lily will produce several tubers during the summer months. Our illustration shows a tropical lily tuber. The tubers may vary in size from 1 inch to four inches in diameter, leave the tropical lily in the pool until ice has formed and killed the tops. Then take crown and also the small tubers you find mostly near the center, out of box. Throw these tubers in cold water in a bucket and keep them in cellar. The roots should be trimmed very close before the tubers are put in bucket, also the top growth. This keeps the water from spoiling. In about a week's time the tubers should be taken out of bucket and washed clean. Then place the tubers in a glass or enameled receptacle packed in sand; always see that there is some water above the sand. The tubers are resting now and should be kept at a temperature of about 60° F. near a window in the basement. They are left in this condition until about the middle of March. Now they are brought up in the sun parlor or living room and each tuber is planted in a small 3-inch flower pot in an aquarium filled with water. The small aquariums listed in catalog, holding three gallons of water are well suited for their development. They should be placed in either southern or eastern exposure, no other exposure will do. They should be kept close to the window. It is a great pleasure to see the young plants develop from tubers. The tubers may rest for another month or may begin to produce a new plant at once. Our illustration shows a growth of three weeks after the tuber was placed in the sun for growing. Sometimes the young plant may die again and in this case the tuber will produce another plant. Sometimes a tuber will produce quite a number of plants. The best results are obtained usually with young or small tubers, the old tuber usually rots after the second year. It may be noted and interesting that the tropical night bloomers are easier propagated this way than most day bloomers.

The young plants produced by the viviparous day bloomers are hard to keep over winter unless you have a greenhouse. They will produce tubers well as young plants from the leaves. And it is best to handle the tubers only. Tropical lilies should be planted from 4 to 6 inches below the water surface.





WATER LILY COLLECTION NO. 15

Our Beauty Collection

A group of four popular varieties, fragrant and prolific bloomers that attract attention in every garden. A very pleasing color combination. Flowers from 8 to 12 inches across.

- 1. Omarana
- 2. August Koch
- 3. Mrs. Edward Whitaker
- 4. Mrs. G. H. Pring

Special
Collection
Price \$4.00

JUST WHAT SHALL I PLANT NEAR THE LILY POOL?

This is a question which is asked very often and at times hard to decide. The answer is that such perennial plants that usually thrive along the banks of streams or ponds are best adapted for artificial plantings near the pool; the ground around the pool naturally is bound to contain more moisture, especially if the soil is light and loamy. We have listed on this page a few old favorites, with which you can carry out the desired natural effect. It is best to plant more in groups, so as to leave open spaces near the pool.

Blue Siberian Iris (*Iris siberica*)—Of easy culture and very free flowering, very good for naturalizing and planting near water.

Each \$0.15

Per dozen \$1.50

German Iris—Iris are ideal plants for edging or planting among rocks. Assorted colors.

Each \$0.10

Per dozen \$0.75

Blue Flag (*Iris versicolor*)—A tall growing iris, producing beautiful blue flowers, the sword-shaped leaves resembling the Japanese iris.

Each \$0.15

Per dozen \$1.50

Yellow Flag (*Iris pseudacorus*)—Very similar to blue flag, with large yellow flowers.

Each \$0.15

Per dozen \$1.50

Lobelia Cardinalis (Cardinal Flower)—A very hardy and attractive native plant, seen along lowland and streams.

Each \$0.25

Per dozen \$2.50

Chinese Hibiscus (*aurantiacus* and *carmiratus*)—Red and pink. Two wonderfully improved varieties, producing flowers about 10 inches across. Very hardy and equally at home in wet or dry soil.

Each \$0.25

Per dozen \$2.50

Spirea Ulmaria (Meadow Sweet)—Adapted best to moist loamy soil, plumes snow white, blooms July and August (2 feet).

Each \$0.25

Per dozen \$2.50

Variegated Ivy—A very attractive plant with green leaves which show large blotches of distinct white and yellow and orange colors. Strong plants.

Each \$0.35

Per dozen \$3.50

Sedums—These plants are great favorites and the green low-growing foliage is covered with many variegated colored flowers. They are very good for planting among rocks near edge of pool. Assorted colors and varieties.

Each \$0.10

Per dozen \$1.00



Iris Siberica



Spirea Ulmaria

LILIUM

Hardy Lilies to Glorify Your Lily Pool

They are the aristocrats of border plants and lend a fine effect to the whole display. They will thrive

in any kind of loamy soil and love a lot of moisture. They should be planted about 8 inches deep.

Lilium Regale, large trumpet shaped white flowers with yellow shading in center; very fragrant. Grows about 3 feet high.

Each \$0.30

Per dozen \$3.00

Superbum, grows from 3 to 5 feet high; flowers brilliant orange-red.

Each \$0.30

Per dozen \$3.00

Lillium Tenuifolium, fire-red, bell-shaped flowers,
grows about two feet high.

Each \$0.25

Per dozen \$2.00

Funkia Variegata, the foliage is green and variegated with broad white stripes. Clusters of purple flowers are produced in September on stems about 2 feet tall.

Each \$0.25

Per dozen \$2.50



Lilium Regale

Speciosum Rubrum, a very popular variety; color rosy white with crimson spots; blooms June and July.

Each \$0.40

Per dozen \$4.00

Longiflorum Giganteum, the flowers are trumpet shaped and white.
Blooms June and July (2 feet).

Each \$0.35

Per dozen \$3.50

Tigrinum Splendens, orange-red spotted with black; June and July (4 to 5 feet).

Each \$0.25

Per dozen \$2.00

Tigrinum Flora Plena, same color with double flower. Blooms June and July (4 to 5 feet).

Each \$0.30

Per dozen \$3.00

Auratum (Golden banded), flowers very fragrant; color pale ivory with crimson, chocolate spots. Blooms July to September (3 to 5 feet).

Each \$0.30

Per dozen \$3.00

Lily of the Valley, This is an old-fashioned favorite, growing about 8 inches high. Clusters of bell-shaped tiny white flowers are produced on single stems. If grown in a sunny position they require lots of moisture. Can also be grown on north side of house or under large shade tree where the sun does not shine. Strong bulbs.

Each \$0.05

Per dozen \$0.50



Speciosum Rubrum

COLLECTION NO. 16

Japanese Water Taro



Imperial Taro

Rose Star

Water Hyacinth

Violet Stemmed Taro

Egyptian Paper Plant in Background and Umbrella Palm in Front

Japanese taros, Umbrella palms, Water hyacinths, Egyptian paper plants, combined with the beautiful Mrs. Ward (Rose Star) Water lily, make an ideal combination for any pool. We offer this whole collection, one of each, for only \$2.75.

These plants must be planted after June 1 when all danger of frost is past.

Separate price of plants:

	Each
Imperial Taro (<i>Colocasia A. Illustris</i>)	\$.50
Violet Stemmed Taro (<i>Colocasia violacea</i>)	.50
Egyptian Paper Plants	.50
Umbrella Palm	.25
Water Hyacinth	.10
Mrs. Ward (Rose Star). A beautiful rose colored Tropical Lily, centered with golden yellow stamens. The flowers are carried well above water and are borne in great profusion	1.50
Special Taro Collection, one of each variety	.95

Ornamental Grasses and Hemerocalis

Makes Ideal Border Plants for the Lily Pool

Especially the Hemerocalis love a lot of moisture. For good effect Hemerocalis and ornamental grasses are indispensable for landscaping your water garden.

Hemerocalis fulva, grows from 2 to 3 ft. high with brick red flowers.

Hemerocallis flava, yellow day lily, grows about 2½ ft. high and blooms early in June.

Hemerocalis kwanso, same as *flava* with double flowers.

Hardy Ornamental Grasses

Arundo Donax Variegata, a very strong growing grass, producing a broad green foliage with various white stripes, attains a height of 10 to 12 ft.

Each \$0.35 Per dozen \$3.50

Eulalia Japonica, this variety grows about 5 ft. high with light stripe through center.

Each \$0.25 Per dozen \$2.00

Gynierium Argenteum, pampas or plume grass. One of the best of all grasses producing very large silvery plumes on stems which grow about 8 ft. tall.

Each _____ \$0.50

Eulalia Gracillima (Japan Rush), the narrow leaves are green with silver stripe in center (4 feet).

Each \$0.15 Per dozen \$1.50

Japonica Variegata, the leaves are striped green and white (4 feet).

Each \$0.20 Per dozen \$2.00

Phalaris A. Variegata (Ribbon Grass), creamy white stripe on green leaf (2 ft. high), good for edging.

Each \$0.15 Per dozen \$1.50

Festuca Glauca (Blue Fescue), the foliage of narrow leaves is distinct blue-green (2 ft.).

Each \$0.25 Per dozen \$2.50

Pandanus—These beautiful variegated plants with sword shaped leaves make ideal rock plants during summer and are very hardy indoors over winter.

Small 10-inch plants-----\$0.60

Medium 14-inch plants----- 1.00

Large 18-inch plants_____ 1.50

All Prices for Hemerocalis (Day Lilies)_____

----- Each \$0.20 dozen \$2.00



Hemerocalis



Pampas or Plume Grass



SPECIAL COLLECTIONS OF RARE AND HARDY WATER LILIES

Marliac	No. 7	Marliac pink	Special Price	\$2.40
Trio	No. 8	Marliac white		
	No. 9	Marliac yellow (Chromatella)		
Collection No. 12	No. 5	Comanche	Special for these two	\$4.50
	No. 6	Escarboucle		
The Regal Collection	This includes one lily of each No. 5 to No. 9.		All five lilies, Special Price	\$6.75

Bog Plants for the Edge of the Lily Pool

These plants grow best in shallow water near the edge of pool. If planted in boxes or flower pots in



Water Taro

Cyperus Papyrus (paper plant), grows from 4 to 6 feet high, produces a tuft, a top resembling a feather duster.

Each.....\$0.35

Parrot Feather, the long trailing stems produce a beautiful light green foliage, good for the ends of pools.

Each \$0.10 Per dozen \$1.00

Giant Arrow Head (*Sagittaria sagittifolia*), the large arrow shaped leaves stand two feet above water. The white flowers are carried on long center spike.

Each \$0.25 Per dozen \$2.00

Cat-tail (*Typha Angustifolia*), a well-known native swamp plant.

Each \$0.20 Per dozen \$2.00

Umbrella Palm (*Cyperus alternifolius*), a well-liked plant which produces an umbrella like tuft on each stem.

Each.....\$0.25 and \$0.50

Thalia Dealbata, a hardy bogplant with stately canna-like leaves. Grows 2 ft. high with purple flowers.

Each.....\$0.50

Thalia Divaricata, a newer variety, grows 5 ft. high, producing large clusters of purple flowers.

Each.....\$0.50

Floating Heart (*Nymphoides Peltatum*), grows like a miniature water lily and produces an abundance of small yellow lacy flowers about 1 in. across.

Each \$0.25 Per dozen \$2.00

Pickrel Rush (*Pontederia Cordata*), this canna like plant with arrow shaped leaves grows about 2 ft. high and produces long spikes of blue flowers.

Each \$0.15 Per dozen \$1.50

Water Poppy, this nymphaea like aquatic produces a continuous mass of yellow flowers, the leaves are deep green and very smooth and float on the surface.

Each \$0.15 Per dozen \$1.25

Marsh Marigold (*Caltha palustris*). Clusters of large butter-cup-like flowers of brilliant yellow, early in spring. One of the most attractive native plants. Hardy.

Each \$0.20 Per dozen \$2.00

concrete pools, boxes should be raised within 2 to 4 inches below water surface.

Purple Water Iris, this iris grows in shallow water or moist soil, about 2 ft. tall. Flowers purple blotched with pale yellow near center.

Each \$0.25 Per dozen \$2.50

Water Snowflake, a lily like plant that produces an abundance of tiny white flowers which grow from the centers of leaves.

Each \$0.25 Per dozen \$2.50

Canna Flacidda, an aquatic canna producing yellow flowers; this plant grows about 2 ft. high and does well in shallow water.

Each \$0.15 Per dozen \$1.50

Lizard's Tail, a pretty plant for shallow water, producing fragrant white flowers, grows 2½ ft. high with heart shaped leaves.

Each \$0.20 Per dozen \$2.00

Imperial Taro, the leaves are light green and beautifully blotched in dark violet colors, grows about 2 ft. high.

Each.....\$0.50

Violet Stemmed Taro, the deep green leaves are pronounced through the addition of dark red ribs, grows about 2 ft. high.

Each.....\$0.50

Calla Lilies, these old fashioned plants are still great favorites in the water garden. Can be supplied in the white or yellow flowering variety.

Each.....\$0.50

Double Flowering Arrowheads, they develop beautiful spikes of double flowers which are white and are very strong growers.

Each.....\$0.75

Variegated Sweet Flag (*Acorus calamus variegatus*).

Each \$0.20 Per dozen \$2.00

New Water Fern, this water fern grows about 1 ft. high and must be planted in real shallow water. Foliage light green.

Each.....\$0.35

Four-leaved Water Clover (*Marsilia quadrifolia*). A shallow water plant, producing leaves resembling clover. Grows about 6 inches tall.

Potted plants, each.....\$0.20



New Trailing Arrow Head

This new arrow head throws out long runners, some getting as long as 6 feet. It has beautiful, deep green, leathery, arrow-shaped leaves. This plant is not hardy but can be equally as well used as a house plant over the winter months. Very attractive in outdoor pools. Plant so that pot is half-way submerged in water. Price, each.....\$0.60

BELDT'S PORTABLE POOL

It is easy to have a water garden with these portable pools. It is just the thing you have been looking for. Just dig a hole in the ground to fit this pool, and fill it with water. These pools are guaranteed not to leak, and they cannot be damaged by freezing or thawing as the material contracts and expands and will not leak or break.

The heavy fabric is chemically coated with rubber asphaltum compound, to make it absolutely water-proof. It is shipped to you folded in a box.

Small Junior Size: 40" long; 24" wide; 12" deep
Surface Measurements-----\$4.75

Large Size: 6 ft. long; 4 ft. wide; 18" deep. Sur-
face Measurements-----\$8.75



This photograph was taken about three months later. It is easy to realize how you can convert a small space into a beautiful water garden with a minimum of efforts and expense.



This photograph shows how simple the installation of our junior size, 40 inches long Portable Pool really is. It is no trouble now to have a water garden.

Special portable pool collection, as seen in illustration; for the small pool:

3 Ornamental Grasses	
1 Water Taro	
1 Chromatella	Special
3 Water Hyacinths	Price-----
2 Water Canna	\$2.25
2 Oxygenating Plants	

Special portable pool collection for large pool:

1 Chromatella	
1 Blue Beauty	
1 H. C. Haarstick	
6 Water Hyacinths	
6 Shell Flower	Special
12 Oxygenating Plants	Collection
2 Parrotsfeather	Price
2 Umbrella Plants	\$8.25
3 Water Canna	
2 Pickerel Rush	
1 Water Taro	

SPECIAL TUB COLLECTION

No. 1—1 White Cedar Tub, 1 water lily (you may choose any one of the following varieties) Caerulea Blue, Caerulea pink, Lotus Dentata white, Omarana pink, Rose Magnolia, Hoptacong white, Odorata white; 3 water hyacinths, 5 different aquatic plants and the following border plants: 3 Hemerocallis, 2 different ornamental grasses.

Complete Collection with tub-----\$4.60

Complete Collection without tub-----\$2.35

No. 1-A—White Cedar Tub, 3 Ornamental Grasses, 1 Dauben water lily, 3 oxygenating plants, 3 water hyacinths, 6 small goldfish, 3 Jap Snails.

Complete Collection with tub-----\$4.90

Complete Collection without tub-----2.65



White Cedar Tubs

These white cedar tubs are 24 inches in diameter and 12 inches deep, and make ideal natural pools. Just dig a hole in the ground, and you are ready to plant your water garden.

Price of White Cedar Tubs, Each....\$2.25

Floating Plants for the Pool

See our complete list of floating and aquatic plants which can be used for indoor aquarium or lily pools on pages 12 and 13.



- Shell Flower (W. Lettuce) and Water Hyacinth
- Parrotsfeather, a beautiful floating plant with long trailing green foliage.
Each \$0.10 Per dozen \$1.00
- Water Hyacinth (Eichornia), the old fashioned favorite floating plant, native to Florida. Producing beautiful lilac-blue flowers.
Each \$0.10 Per dozen \$1.00
- Water Lettuce (Pistia Stratiotes), the velvet green leaves form a rosette. They love plenty of heat and partial shade.
Each \$0.10 Per dozen \$1.00
- Azolla Carolina, a beautiful small floating plant which turns red when exposed to strong sunlight.
Per portion \$0.25
- Duck Weed, an old favorite. The small foliage is also greatly relished by goldfish and acts as a tonic.
Per portion \$0.25

- Water Snowflake
- A nymphaea like aquatic, large clusters of white blossoms are produced from center of leaves.
Price each \$0.25
- *Purple Water Hyacinth (Eichhornia azurea).
A creeping plant without the floating bulbs of the ordinary Water Hyacinth but with more handsome blossoms.
Each \$0.35 Per dozen \$2.50
- †Water Nasturtium or Water Cress. Thrives in sun or shade; ideal near a cold spring. Edible, hardy. Rooted plants.
Each \$0.10 Per dozen \$0.75

- Water Hawthorne
- A pretty plant similar to water lilies; produces oval shaped leaves and clusters of white flowers.
Each \$0.75

- Water Chestnut
- Trapa Natans Incisa, it receives its name from the chestnut-like spiked seeds produced by white flowers. It trails along the surface of the water and produces a beautiful mottled green foliage. Can only be supplied after June 1.
Price, each \$0.50
- Trapa Natans Bisipinosa, a larger growing type of water chestnut producing larger leaves and flowers. Growing plants can only be supplied after June 1.
Each \$0.75
- Water Chestnut Seeds, these seeds can be supplied at any time of the year. When placed in a glass of water they will sprout and make beautiful floating plants.
Each \$0.25 5 for \$1.00

Submerged or Oxygenating Floating Plants		
	each	dozen
Anacharis	\$0.10	\$1.00
Cabomba	.10	1.00
Coontail	.10	1.00
Miriophyllum	.10	1.00
Ludwigia	.10	1.00
Potamogeton	.15	1.50

SPECIAL WATER LILY COLLECTIONS

St. Louis Trio (Flowers 24 Hours of the Day)			1933 Special (All Hardy Lilies)		
1 Col. Lindbergh			1 Aurora		
1 Emily Grant Hutchings	Special		1 Comanche	Special	
1 Red Star	Price	\$4.20	1 Chromatella	Price	\$5.25
			1 Sun Rise		



This photograph of Water Taros in our greenhouses gives you an idea of the striking effects, that can be secured in planting these beautiful bog plants either in the center or near the edge of pools. The cost of these plants is so small considering the beautiful effects that can be secured if you include them in your planting arrangements. By all means don't fail to get at least one of each. The variegated and red variety now are priced at only 50c each.



Nelumbiums (Egyptian Lotus)

Nelumbiums are hardy and they should be planted in one foot deep boxes filled with good rich dirt. The boxes should be about two feet square and the top of box about 6 inches under water.

Nelumbium Speciosum (pink variety), each.....	\$1.50
Potted plants can be supplied after June 1, each.....	2.50
Nelumbium Lutea (large yellow flowers), each.....	1.50
Potted plants can be supplied after June 1, each.....	2.50
Nelumbium Album Striatum (white flowers), each.....	2.50
Potted plants after June 1, each.....	3.00

Nelumbiums grow to about 4 feet high, flowers about 8 inches diameter and leaves from 10 to 18 inches across. They can not be shipped before May 20th.

Special Nelumbium Collection

One tuber of each variety for only.....	\$3.25
One potted plant of each variety for only.....	6.50



TROPICAL WATER LILIES

H. C. Haarstick—A new night bloomer, which has flowers of beautiful shades of lavender-pink. Large plants will produce flowers of 12 inches or more in diameter. They are very strong growers and bloomers, and one plant will produce as many as 150 flowers during the summer months. The leaves are reddish-brown in color. A feature which makes it so much more desirable is that the beautifully colored leaves add greatly to the attraction of the pool.

H. C. Haarstick should be in every collection.

Price, each \$2.00

Marmarata—A lavender-blue day bloomer. Here is another tropical lily with beautiful colored leaves. The color of the leaves is medium green with dark greenish-brown blotches. The leaves are an attraction as well as the large flowers which are produced in abundance.

Price, each \$1.50

SPECIAL COLLECTION NO. 11

1 H. C. Haarstick and 1 Marmarata

Special Price \$3.25





WATER LILY COLLECTION NO. 17

No. 1—Blue Star	Special Collection	
No. 2—General Pershing	Price for this	\$4.75
No. 3—August Koch	Crown Tric	

These three Water Lilies photographed in natural colors are set against a back ground of a natural color photograph of Blue Star Water Lilies in one of our pools. The Blue Star carries its flowers on strong stems about 2 ft. or more above the water surface. Tropical lilies are fragrant, large and make ideal cut flowers.

Please Notice

Most of our tropical lilies will bloom at least one week after planting. Lots of them are shipped with flower buds so that you may expect an immediate effect. Too often customers insist on early shipments, which is a mistake based more on inexperience on the part of the water gardener. In the Latitude of St. Louis, Tropical Lilies should never be planted before May 20. Allow us to ship your tropical lilies at proper planting time and you will never be disappointed with results.

Tropical Water Lilies—Day Bloomer

Caerulea Blue—Ancient Blue Lotus of the Nile, flowers four to six inches across, carried well above the water, each.....\$0.75

General Pershing—A hybrid from Mrs. Whitaker and Castaliifolia. The pink flowers are delightfully fragrant and open early in the morning. Strong plants. Price each.....\$2.00

Mrs. George H. Pring—A new water lily, pure white in color, flowers 8 to 10 inches across. Very fragrant and prolific. Price each.....\$.75

Henry Shaw—Named in honor of the founder of the Missouri Botanical Gardens. Flowers beautifully blue. Delightfully fragrant. Price each.....\$2.00

Zansibar Rosea—A delightful pink shaded day blooming lily producing flowers about 6 to 8 inches across, very free flowering. Price each.....\$0.75

William Stone—This is a beautiful and attractive deep blue purple lily. The flowers are 8 inches across and star shaped. Price each.....\$2.00

Edward C. Elliot—This is another new lily, produced by the Missouri Botanical Gardens. The fragrant pink flowers are produced in abundance. Price each.....\$1.25

***August Koch**—Produced in the lily pools at Garfield Park, Chicago, by Mr. August Koch. The flowers are purple lilac and the petals a pale violet color, 7 to 8 inches in diameter, open four to six days. Price each...\$1.50

***Mrs. Edwards Whitaker**—The largest flowering day-blooming hybrid from Ovalifolia and Castaliiflora. Colors in shades of light blue or dark blue. Price each.....\$1.00

***Panama-Pacific**—A hybrid produced by William Tricker. The predominant color is reddish-purple and the stamens are yellow. Very fragrant and most prolific in blooms. Price each.....\$2.00

***Wilson Gigantia**—A hybrid produced from Mrs. Woodrow Wilson and Castaliiflora. A dark lavender-blue flower, 8 to 10 inches across. Price each.....\$2.00

***Mrs. Sawyer (Independence)**—A new viviparous day blooming lily, the leaves are shaded with brownish red and the flowers are very deep pink. Very vigorous and free flowering. Price each.....\$2.00

***Dauben**—A well-known viviparous day bloomer. The small light blue flowers are produced freely. A good plant for small pools and aquariums. Price each.....\$0.75

***Marmarata**—This variety produces perhaps one of the most beautiful leaves of all tender nymphaes. The leaves are medium green colored with large blotches and squares of brown. The flowers, which are 12 inches across, are blue on the first day they are open and gradually become lighter until they are almost white on the last day. Price each.....\$1.50

Rose Star (Mrs. Ward)—The flowers are carried well above water and get about 8 inches in diameter. They are of a beautiful rose-pink color with long golden stamens. Each.....\$1.50

Blue Star—A beautiful deep blue variety about 7 inches across, the flowers at times are carried 18 inches above water. A very strong grower and prolific bloomer. Each...\$1.50

Colonel Lindbergh—A deep caerulean blue variety producing flowers up to 12 inches across which tower well above the water. The oval shaped leaves are blotched with brown. Each.....\$3.00

Ovalifolia—A large flowering light blue water lily. The flower is about 10 inches across. A very strong and prolific bloomer. Each...\$1.50

Gracillis Rubra (Red Star)—This star lily has wine red flowers which like the other star lilies are carried well above water. Price each.....\$1.50

*All lilies with star in front of name are viviparous, which means that young plants are produced from center of leaves. Tropical lilies should not be planted until latter part of May or early June and they should only be planted about 4 or 5 inches below water surface.

Tropical Water Lilies—Day Bloomer



Gracillis Rubra (Red Star)
each \$1.50



Cyperus Papyrus (Paper Plant)

- Small plants, each.....\$0.35
- Large clumps, each.....1.00

MAGIC WATER LILY FOOD

Beldt's Magic Water Lily Fertilizer and Plant Food

Has been perfected after years of experimenting. Magic does not foul or sour the water in your pool and leaves it absolutely free of foreign colors. In our experimental pools Magic Water Lily Food proved that flowers will double in size and that especially newly planted water lilies and all other aquatic plants will make as much growth in one month as they would in two months if planted in ordinary soil. Use 1 pint of Magic Water Lily Food to mix with 1½ bushels of soil. Complete directions with every carton.

- 1 Pint Cartons, each.....\$0.35
- 5 lb. bags, each.....1.05



Hardy Bamboos

Bamboos are very ornamental and give that desired tropical affect. We list here the two best varieties.

- Arundo D. variegatus, each.....35
- Arundinaria tecta, each.....50

SPECIAL WATER LILY COLLECTIONS

Marliac Trio

- | | |
|----------|---------------|
| 1 Pink | |
| 1 White | |
| 1 Yellow | |
| | Special Price |
| | \$2.40 |

Special Collection No. 18

- | | |
|------------------|---------------|
| 1 Marliac Yellow | |
| 1 Gloriosa | |
| 1 Blue Beauty | |
| | Special Price |
| | \$3.75 |



HARDY WATER LILY

Rose Arey

Without question the finest hardy pink. The petals are long and oval formed and uniform deep pink.

Each \$1.50

HARDY WATER LILY

James Brydon

This free flowering cup-shaped lily is of deep rosy crimson color and a very strong bloomer.

Each \$2.00



Night Blooming Tropical Water Lilies

Victoria Crouziana—The leaves are 5 feet in diameter and the white flowers are 1 to 1½ feet across. Should be planted in at least 8 cubic feet of dirt and requires a water surface of 100 square feet at least to bring it to perfection. Only for very large pools. Price each.....\$10.00



Victoria Crouziana

Victoria Crouziana Seeds, --each 20c, 6 for \$1.00

Lotus Dentata—The flowers are large and cup-shaped. The petals are white and pink tipped. A strong and vigorous grower. Price each.....\$0.50

Devonshire—Bright, rosy red flowers, 8 to 10 inches across, flowers well above the water. Price each.....\$1.00

Frank Trelease—The flowers are tyrian, pink with dark bronzy red leaves. Price each....\$1.00

Juno (Dentata Superba)—A magnificent white night bloomer. Flowers from 8 to 12 inches across. The petals are wide open and give the flower a flat appearance. Price each.....\$1.00

Columbiana—A new red nymphaea of European origin. The red flowers are 10 inches across. Columbiana is a very prolific bloomer and one of the best red night bloomers. Price each.....\$2.00

H. C. Haarstick—A new hybrid produced by the Missouri Botanical Gardens. Its color may be described as a rare lavender pink. The large flowers are carried well above the water and at times attain a size of more than 12 inches. The reddish brown leaves are a beautiful addition. Without question the finest night bloomer. Price each.....\$2.00



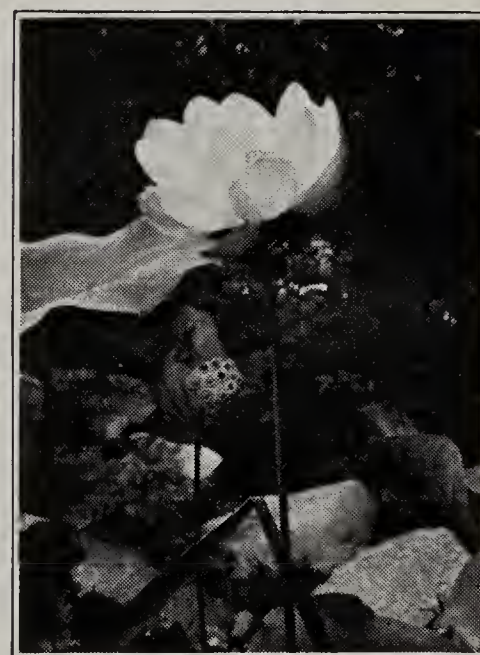
Emily Grant Hutchings
Each \$2.00

Rubra Rosea—A native lily of India, producing rosy carmine flowers, 6 inches across. The flowers are star shaped and borne freely. Price each.....\$1.00

Omarana—Shaded pink in center and gradually diminishing in color until the tips are almost white. Flowers 6 inches across, a prolific bloomer. Price each.....\$0.75

Sturtevant—A beautiful bright red flower, 8 to 10 inches across, requires a large planting box for roots with plenty cow manure mixed in to bring it to perfection. Price each.....\$1.00

Emily Grant Hutchings—A pink shaded night bloomer which produces immense large cup shaped flowers. Price each.....\$2.00



Nelumbiums (Egyptian Lotus)

Every pool should contain at least one of these varieties of lilies, as they bloom at nights when all other water lilies are closed; therefore, giving you flowers 24 hours of the day. We only list the finest new Hybrids produced:

This photograph was taken by Mr. William G. Schumm, La Porte, Indiana. Mr. Schumm is well pleased with the Egyptian Lotus he received from us, and he advises that he left the plant out in the water tub all winter without any protection.



HARDY LILY

Comanche

One of the best hardy lilies of changeable color opening with a rich apricot color changing to a deep bronze.

Each.....\$1.50



HARDY LILY

Paul Hariot

The changeable colors of this lily are admired by everyone. Opening with light orange shades which turn to various pink shades.

Each.....\$2.00

SELECT AND RARE HARDY LILIES



Hardy Water Lilies: Comanche Chromatella and Morning Glory

Indiana—A beautiful changeable orange-pink hybrid. On the opening day the flowers are yellow and later change to deep orange and deep crimson colors.

Price, each.....\$2.00

Albacandidisima—A new large flowering creamy white lily with full flowers.

Each.....\$1.00

Conqueror—A strong growing, deep red flower, very large. Stamens yellow-orange.

Price, each.....\$3.00

Attraction Day Bloomer—A French introduction, one of the finest hardy lilies ever produced. Flowers from 6 to 8 inches across. Upon opening the color of petals is garnet-red and the sepals almost white, stamens yellow, slightly touched with mahogany.

Price, each.....\$3.00

Escarboucle—A very attractive variety, flowers being a uniform vermillion-red.

Price, each.....\$3.00

James Brydon—A free grower with rosy crimson flowers.

Price, each.....\$2.00

Paul Hariot—Upon opening the first day the flowers are canary yellow. The second day they are shaded with pink and on the third day this pink suffuses the whole flower.

Price, each.....\$2.00

Rose Arey—The color of flowers is uniform clear pink.

Price, each.....\$1.50

Marliac Yellow—Bright canary yellow.

Price, each.....\$0.50

Eugenia De Land—Flowers extra large, deep rose-pink, with yellow stamens.

Price, each.....\$1.00

Gladstone—Flowers 6 to 8 inches across, strong growing white lily.

Price, each.....\$1.50

Hopatcong—Native white lily, very hardy and a strong grower.

Price, each.....\$0.50

Gloriosa—The blossoms are of a beautiful red shade, six inches across and very fragrant. It is a good plant also for tub culture, as the leaves are very small; however, is equally as well at home in very large pools.

Each.....\$2.50

Marliacea Rosea—Flowers are large and deep rose colored.

Price, each.....\$1.00

Odorata—Flowers are large white, a very prolific bloomer; the plants make rapid growth.

Price, each.....\$0.35

Odorata Rosea—Beautiful pink shaded flowers from 4 $\frac{1}{2}$ to 5 inches across. A good strong bloomer which produces flowers well above the water.

Price, each.....\$1.00

Yellow Pygmy—A small lily which is ideal for tub culture. The flowers, which are golden yellow, are from an inch to two inches across.

Price, each.....\$0.75

Mexicana—A deep yellow lily with smaller flowers about 4 inches across. Ideal for small pools or edging in large pools.

Each.....\$1.00

Marliacea White—Same as Marliac Rose, except pure white flowers.

Each.....\$1.00

Comanche—One of the finest hardy lilies with changeable color, which on opening day is of a rich apricot shade, changing later to a deep bronze.

Each.....\$1.50

Sunrise (Giant Yellow)—The largest and best of all yellow lilies, producing very large yellow blooms.

Each.....\$2.50

Lucidia—A beautiful deep red hardy lily and a very free bloomer.

Each.....\$2.50

Aurora—On the opening day this lily is light orange-red, changing to a very deep color as it gets older, on the third day.

Price.....\$0.75

Flava—A beautiful small yellow lily with flowers about 4 inches across, carried well above water. One of the deepest yellow.

Each.....\$1.50

Helen Fowler—A pink shaded lily; a strong grower and prolific bloomer.

Each.....\$1.00

Morning Glory—An exquisite soft shell pink, one of the best for cut flowers. The blossoms are about 5 inches across.

Each.....\$1.50

Marliacea Carnea—A beautiful flesh colored variety similar to Morning Glory; a very prolific bloomer producing flowers in abundance.

Each.....\$1.00

Rose Magnolia—A beautiful flesh pink colored hardy lily. A good bloomer.

Price, each.....\$1.00



SUNRISE

Without question the finest hardy lily. The flowers which are unusually large and cactus shaped resemble a yellow dahlia. It is of a uniform yellow color and surpasses all other yellow water lilies. A great feature is the unusual fullness of the three rows of petals. Price each.....\$2.50

A FEW UNSOLICITED TESTIMONIALS

We are including these few abstracts of letters to show that distance is no boundary for good service, and that we can actually make shipments of fish and have them arrive alive, and in good condition

anywhere in this country. You will be satisfied to deal with us and we always appreciate hearing from you, even if you have a complaint coming on a shipment. Tell us; it's our business.

Gillette, Wyo.
Nov. 28, 1932

Beldt's Aquarium:

I received the two pair of Guppyi and tadpole this morning, and they appear to be in excellent condition.

Edna Archibald
c/o Campbell Co. High School

Clarksville, Tenn.
April 18, 1932

Beldt's Aquarium:

I was so satisfied with your plants last year, that I want you to suggest lilies for my pool again.

Mrs. J. C. Gill

Chariton, Iowa
June 9, 1932

Beldt's Aquarium:

Perhaps you might be interested to know I successfully filled the cracks in my pool with your black Asphaltum enamel. One crack was so large the water seeped out. Sarah Jane White

Coldwater, Mich
Jan. 8, 1932

Beldt's Aquarium:

I want to tell you in what fine condition the fish arrived. They were all active and healthy and I was more than pleased with them. Of course I had pictures of them in my mind how they would look, but they were so much bigger and stronger than I had expected, that I can hardly tell you how delighted I am with them.

Mrs. W. E. Wilbur

Belvidere, Ill.
Jan. 9, 1932

Beldt's Aquarium:

The aquariums arrived O. K. and the large one is a beauty. We are so pleased with it.

Mrs. Wm. M. Freeman

Topeka, Kansas
April 1, 1932

Beldt's Aquarium:

The fish arrived in excellent condition, and we want to thank you for the prompt service. Also we do appreciate your sending them in the thermos container. We are sending the can back this afternoon.

Margaret A. Sullivan

Denver, Colo.
March 31, 1932

Beldt's Aquarium:

Shipment received O. K. Not a fish lost.

J. M. Lowell

Honolulu, Hawaii
April 9, 1932

Beldt's Aquarium:

All the fish received from you, but one Barbus, received in 1930 are still alive, fully grown, and healthy.

P. W. Rushforth

San Jose, Costa Rica
Feb. 9, 1932

Beldt's Aquarium:

The shipment arrived in perfect condition, and all fishes are doing very well. Fanciers here tell me it was exceedingly good luck, because nobody here has been able to receive the fishes alive.

E. F. Alvarado

Azuso, Calif.
Feb. 10, 1932

Beldt's Aquarium:

Received the Black Banded Sunfish in first class condition and am very much pleased with them.

Chas. Eagle

Boston, Mass.
Dec. 2, 1931

Beldt's Aquarium:

The shipment arrived in excellent condition.

W. H. Lawrence

Mankato, Minn.
Nov. 20, 1931

Beldt's Aquarium:

Your fish arrived today in splendid condition. The order was filled with very fine specimens and the temperature of the water was 72° upon arrival.

N. H. Nitzkowski

Ft. Wayne, Ind.
Dec. 23, 1931

Beldt's Aquarium:

The fish I ordered recently arrived in first class condition. I want to thank you for the prompt and efficient manner with which you handled orders.

Paul Brinkroeger

Minneapolis, Minn.
April 19, 1932

Beldt's Aquarium:

The fish reached me in excellent condition.

Jeannette Corser

Omaha, Texas
April 27, 1932

Beldt's Aquarium:

I just want to tell you that I am well pleased with the collection of Calicos, Japs, and Moors you shipped to me recently. They are a healthy and vigorous bunch and have spawned in my ponds. I did not expect so many high price fish for the price.

E. Y. Anthony

St. Joseph, Mo.
April 10, 1932

Beldt's Aquarium:

I have taken care of my night blooming water lilies according to your directions in your large book, and have quite a number of small plants in 3" pots.

Cliff H. Rivers

Crooksville, Ohio
Jan. 30, 1932

Beldt's Aquarium:

I am very much pleased with snails and aquarium plants. They were certainly packed fine.

Geo. W. Havelock

Grand Forks, N. D.
Jan. 21, 1932

Beldt's Aquarium:

I wish to thank you for your prompt attention to my last order, and might state I have had real good luck with them.

Leon D. Pierce

Seattle, Wash.
Nov. 21, 1931

Beldt's Aquarium:

The fish that I got from you could not have been in better condition when I received them, and I have not lost any yet.

John Wanamaker

Port Angeles, Wash.
Nov. 18, 1931

Beldt's Aquarium:

Just a note to express my appreciation of your prompt service and square dealings.

Geo. Manning

BELDT'S FUNGUS REMEDY

Handling fish on a large scale has taught us that a good scientific fungus remedy is the thing needed by everyone having fish. You never know when you may have trouble with them, and if you keep a bottle of Beldt's Fungus Remedy handy for instant use, you can

Carney's Point, N. J.
April 2, 1932

Beldt's Aquarium:

The order which I received from you last week was more than satisfactory. The Fungus Remedy is a fast worker.

A. Gordon Cable

Chicago, Ill.
April 20, 1932

Dear Sir:

Inclosed find money order for \$1.80 for which send me two bottles of Fungus Remedy, also 4 plants of Spatterdock. Your last bottle of Fungus Remedy proved wonders.

Mrs. O. F. Stein

Mukwonago, Wis.
Sept. 27, 1932

Dear Sirs:

Recently, I purchased some of your Fungus Remedy and I must say it certainly did the trick for my Black Platys, that had the so-called itch disease.

Mrs. P. Chapman

Redlands, Calif.
April 12, 1932

Gentlemen:

I have 2 beautiful pools and your Fungus Remedy has worked wonders with my fish. I pour it in the pools when I notice them looking sickly and in a day's time they are O. K.

Mrs. L. D. Childers

eliminate most of the trouble which you naturally will have if you have to wait several days before you can treat them. We are listing below a few unsolicited testimonials from satisfied users.

Berkeley, Calif.
Sept. 12, 1932

Dear Sir:

Please send me two 50c sized Fungus Remedy.

Walter H. J. Scott
P. S. One is for my neighbor next door, Joe Perry, who has a fish pool with some sick fish. Your remedy is the quickest cure I have found anywhere.

Walter H. J. Scott

Jenkintown, Pa.
Aug. 26, 1932

Dear Sirs:

I am enclosing a money order for 50c for which please send me a bottle of Beldt's Fungus Remedy. I secured such marvelous results with the other bottle from you that I don't ever want to be without it again.

Dorothy Rorer

Wellsville, N. Y.
Oct. 13, 1932

Gentlemen:

I have used your Fungus Remedy for some time. I find it is the most effective of anything I have ever used.

Mrs. E. J. Knox

Sterling, Ill.
Feb. 21, 1932

Gentlemen:

Inclosed find 50c for which please send me one bottle Beldt's Fungus Remedy. I have previously secured this from you and found it a fish life-saver in many instances, and I do not wish to be without it.

Katherine Baker

BELDT'S FUNGUS REMEDY

Per Bottle 50c postpaid. Complete directions for use with every bottle.

